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Presented by

H. A. Hare, M. D.

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Charlotte Medical Journal.

A SOUTHERN JOURNAL OF MEDICINE AND SURGERY.

VOLUME 63. NUMBER 1 — Charlotte, N. C., January, 1911. — $2.50 PER ANNUM

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SUPRARENALIN

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THE vast superiority of Suprarenalin Solution places it in front, and this superiority is due to the fact that it is made from an absolutely ash-free crystalline active principle of the suprarenal substance. It is free from impurities, such as phosphates, etc. It is positively free from chemicals, like chloral and its derivatives. It is only a solution of suprarenalin plus 7-10 of 1 per cent chlorid of soda.

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(Signed) Livius Lankford, M. D.
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Richmond, Va. March 19, 1910

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(Signed) Froehling & Robertson.

The Charlotte Medical Journal

VOL. LXII CHARLOTTE, N. C., JANUARY, 1911. No. 1

The Tonsil—Has It Any Function? Is It a Menace to the Organism, as a Focus of Infection? Is the Present Holocaust of Tonsil Necessary? What is the Best Method of Removal When Operation is Clearly Indicated.

By Dr. J. A. White, Richmond, Va,

A prominent surgeon has said, that the tonsil is of greater clinical importance than the appendix; that it causes more suffering and more deaths.

Whether this statement is true or not, there is no question but that both of these apparently insignificant organs have attracted more attention from the surgeons than all the rest of the organism put together. The function of both of them is involved in obscurity, and we know that people apparently get along just as well without them as with them.

Still, it seems reasonable to suppose that, in the scheme of creation and development of man, all the parts that go to make up his economy would have some part to play in the complex whole, or they would not have been made a part of his organism.

Some authorities, especially Bosworth, have taken the ground that the tonsil is not a normal, but a pathological formation, and many others, myself among them, were inclined to agree with him. Investigation, however, of the fœtus at different stages of development, by Mosher and others, have demonstrated that the tonsil is as much a part of the human organism as the thymus or thryroid glands, whatever its function might be.

After birth the period of development of the tonsil ls between the first and eighth year. Having obtained its full development between the sixth and eighth year, whatever function it has is therefore confined to early childhood, because in about the eighth year it begins to atrophy and then gradually disappears, in most cases by the twelfth or fourteenth year. Nearly all children at six years of age have tonsils, at eight the number is less, and at twelve or fourteen years of age probably not over twelve or fifteeu per cent have tonsils.

After this age the presence of the tonsil is regarded by most authors as a pathological phenomenon. If this were true, we are still a long way from determining its function, as most of the observations carried on to this end, were on adult and semi-adult glands.

The tonsil is composed of lymphoid tissue and adenoid cells, forming follicles and crypts, which faver absorption and secretion. The lymphoid tissue is surrounded by a dense capsule of connective tissue from which prolongations extend into the tonsil dividing it into pockets or crypts. It lies between the anterior and posterior pillars of the palate, to which it is united by umocus membrane attachments, that are often taken for pathological adhersions, although these attachments are sometimes increased by repeated attacks of tonsilitis. These crypts are lined by stratified epithelium which is thinner than the surface membrane,

First, Has it any function?

That it has some function is more than probable, but what it is, is still uncertain. It is claimed that the gland acts as a barrier to the entrance of micro-organisms, that it assists leucocytosis, and produces phogocytes. In other words the healthy tonsil is a protective organ against infection, and although the crypts may swarm with bacteria, these stimulate its epithelial cells to throw out a ferment which in turn destroys the micro-organisms, a process known as bacteriolysis (Wright),

If the cells lose their tone by pathological changes, local or constitutional, this process is arrested and infection takes place.

Wood says that the bacteria in the crypts are destroyed by migrated polymorphonuclear phagocytes, before they cause any injury, but if toxine from these bacteria is at all virulent, it breaks down the resistance of the cryptal epitheliúm, which is the first step from immunity towards infection.

Wright seems to think in the civilized man the enlargement of the tonsil is a protective physological act of the organism whilst he abstains from positively asserting it. He looks upon the recurrence of tonsiller enlargment in children who have had a partial removal or tonsillotomy done, as evidence that nature needs it in her defensive armanent; and he quotes a parallel in biology to enforce his statement. At the same time he does not deny that frequently in children, and usually in adults they are a menace if in any way diseased.

It is suggested also that the function of the tonsil is to act as an eliminating organ for the toxines in the system.

Second. Is it a menace to the organism as a focus of infection?

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That the tonsil, in a diseased condition, is a menace to the organism, as a focus of infection, has, I think, been demonstrated by an accumulated mass of evidence, in the last few years, from observers all over the world. The resulting manifestations depend upon the nature of the infective organism, and the resistence met with.

There are two routes to the general system through the tonsil, one by way of the blood vessels and the other by way of the lympathies. Bacteria pass along the lymph channels, but do not penetrate vessel walls, whilst toxines do so easily. Hence toxie infection of the system through the blood vessels, is much more common than the slower process of lymphatic infection or bacteremia. An example of this, is the rapid development of systematic symptoms in acute tonsilitis, whilst glandular enlargment at the angle of the jaw is rarely or ever present at the beginning of an attack and often not at all.

Hence, diseased tonsils can not only bring about local disturbances, but general toxæmia, and secondary infection as well. The list of diseases that follow the various forms of agina are formidable and show the importance of the subject.

Exanthematous diseases: Whether the tonsil has any special influence in the propagation of the exanthematous diseases of childhood, has not been demonstrated, but it is well known that children, with large, soft tonsils, are more prone to attacks of these diseases, and that the type. developed in them, is more violent.

Cervical adenitis: Cervical adenitis has been reported many times as due to tonsillar infection, and the direct connection of the cervical lymph chain, with the tonsillar lymph gland at the angle of the jaw, makes this exceedingly probable. In fact, I have often seen temporary enlargment of the glands of the neck, accompany acute tonsilitis, and also follow the irritation from operation on the tonsil.

That the removal of enlarged or diseased tonsils is a rational part of treatment of cervical adenitis is therefore apparent. And this applies as well to the non-tubercular and the tubercular variety.

Rheumatism: The relationship between certain phases of rheumatism and angina may be said to have been clearly established, as many of the manifestations of so-called rheumatism are now considered by numbers of authors as due to infection. The uric acid theory, and the "wet and cold" theory, except that they lower the resistance to infection, both seem to be on the wane, in favor of the infectious nature of the disease, dependent, either upon a micro-organism, resembling the diplococcus, but not yet sufficiently determined to be referred to as a specific germ of the disease, or upon a coccus group the agent of which has not been isolated.

Semmelweiss, probably, was the first to show the dependency of many cases of anthritis, endocarditis, pericarditis and other acute inflammations of serious membranes upon acute, and sub-acute angina, caused by the same infective agents, the most important of which seems to be the streptococcus, for which the tonsil offers such a fertile field.

Of course, every case of rheumatism may not have had an acute tonsilitis immedlately preceding the attack, nor will every case have enlarged tonsils, but an examination of the throat in such cases will often repay the investigation.

It is not necessary to have a sore throat, for a very mild tonsilitis may pass unnoticed, nor is it necessary to have a large tonsil, as the small submerged tonsil can and often does, cause more trouble than the large ones, but it has been reported by different authors, that quite a number of cases of so-called rheumatism have been materially benefitted by the removal of the tonsillar tissue.

Appendicitis: In looking for the origin of an acute phlegmonous appendicitis, the tonsil should not be overlooked, according to Kretz, whose article on this subject was made occasion of an editorial in the journal of the American Medical Association. In these cases, the predominating organism seems to be the streptococcus, in the appendix, the peritoneal exudate, and the tonsils. The route of the infection may have been by the œsophagas and stomach to the intestines, or, by the cervical lymph nodes and the blood vessels.

Exophthalmic goitre: Exophthalmic goitre has been reported as having its starting point in tonsilitis and quinsy.

Nephritis: Acute nephritis has been reported many times as accompanying or following acute tonsilitis, and this has been my personal experience.

Pleuritis: Geo. B. Wood's classic article on "the importance of the upper respiratory tract in the etiology of cryptogenic infections, especially in relation to pleuritis" ought to convince the most skeptical of the relationship between tonsililitis and pleurisy.

Tuberculosis: As a portal of tubercular infection, I don't think a clear case has been made out against the tonsil, although Robertson and others claim that 8 per cent of tubercular cases are infected through the tonsil. That the tonsil itself is sometimes infected, in case of pulmonary tuberculosis, from coughing up the spuctum, is probable,

but primary tuberculosis of the tonsil is a rare affection, and when present, usually causes turbercular adenitis of the cervical lymph chain, without pulmonary involvement. Some authers state that patients with tuberculosis glands of the neck who are not operated on, develop pulmonary disease in 75 per cent of the cases, whilst only a small percentage of those operated on do so, but the tonsil should be removed as well as the enlarged glands to insure good results. The fact, however, that a diseased tonsil, with open crypts, can and does transmit so many other forms of infection, when its normal resistance to bacterial invasion has been altered, leads us naturally to the conclusion that it may be a ready soil for the propagation of the tubercle bacilli, and transmission of the tubercular infection, although there are few clinical facts to support it.

General infectian: Acute general septic infection also has been known to follow upon tonsolitis, and a number of such cases with fatalities have been reported.

Spasmodic cough, uncertain of the voice, defects in the singing voice, tendency to take cold, and catarrhal deafness have been caused by tonsillar troubies, and cured by removal of the tissue.

I have not the time to go into details of all the different affections that have been traced to deceased tonsils, but I think I have said enough to show that the tonsil, when diseased, is a portal of infection, and a menace to the organism.

Third. Is the present holocaust of tonsils necessary?

Notwithstanding the facts above given, I think there is too great a tendency to radicalism in this regard. It seems to me there is a happy medium between the present terrific onslaught on tonsils, and the conservatism of neglecting operative procedures when really necesiary. All tonsils are not bad and need removal. Many that are removed might be spared.

Most diseased tonsils, or, tonsils that give trouble, should be removed; otherwise they should be let alone. This applies especially to children under eight years of age because, if the tonsil has any special function to perform, it is in early childhood that it is of the greatest importance to the economy, and its integrity should be guarded, unless undoubted pathological effects demands its extripation.

Large tonsils are not necessarily diseased tonsils, and I have seen them at all ages in perfectly healty persons, children and adults, in whom they never made their presence felt. In a child with large tonsils, with no obstruction to breathing, and no pathological manifestations to call attention to the tonsils, I should decline to remove them, if for no other reason than because of the risks attending the operation, without considering their undetermined functions.

Mouth breathing may be caused by enlarged tonsils, without adenoids, or by adenoids without tonsils, or by both combined, but when both are present it may be sufficient to remove the adenoids alone, especially if the tonsils have never given any trouble, and do not of themselves obstruct respiration.

Nor do I consider enlared tonsils in a healthy adult, who has had no recurring attacks of tonsilitis, nor any constitutional troubles traceable to the tonsil, a menace to the individual, and would advise letting them alone.

It is no more a neccessity to remove tonsils, because we have tonsils, than to remove the appendix, because we have an appendix. If they obstruct respiration, and are the cause of mouth breathing, they should be removed.

Repeated attacks of tonsilitis, or quinsy, or the presence of cholesteotomatous masses in the crypts, or hyperkeratoses (mycosis leptothrica), are indications for surgical intervention, because the tonsils are pathologically altered thereby, that they can no longer perform their normal function, whatever that may be, whether as eliminatives of toxines, or, as a barrier against systemic infection, and have become a menace to the organism. But a single attack of tonsilitis is not sufficient to warrant operation, as it may be due to pneumococcus infection.

Recently some operators have advocated the removal of the tonsil, during an attack of acute tonsilitis, to prevent the resulting systemic infection. I do not think this is justifiable, as there is no danger of life, and in some of these cases, there may be no occasion to remove the tonsil at all.

Is the question as to operating during an attack of appendicitis as yet settled? Do not many surgeons advise waiting until the acute symptoms subside, unless the patient's life is in danger?

When cervical adenitis persists, the tonsil should be removed, as cases are recorded where after external operations, enlarged glands have reappeared, when the tonsil was not removed.

Rheumatism does not necessarily indicate the removal of tonsils, although the etiological connection between the tonsil and rheumatic manifestations, has been so well established clinically, that it is logical therapeutics in such cases, to remove them if diseased.

Chrohic middle ear catarrh with tinnitus,

associated with enlarged or irritated tonsils, is also an indication for operation, and an annoying cough is often relieved in the same way.

The operation changes the opsonic index just as other operations which prevent the absorption of toxines and is therefore juftifiable in all cases of probable infection from the tonsils.

Fourth. When operation is indicated which is the best method?

This is a question which is very much agitated at present. Theoretically, it seems rational to suppose, that if the tonsil is to be removed at all, it should in most cases be done thoroughly, *i. e.*, the whole of the tonsillar tissue should be enucleated, an operation known as tonsillectomy. This is rarely done in England, Germany or Italy, and only to a small extent in France.

Tonsillotomy, or, ablation, or amputation of the tonsil, which was the common operation in America a few years ago, is usually performed in Europe.

Whilst most of the prominent laryngologists in this country have given in their adhesion to tonsillectomy, or the radical removal, tonsillotomy is still widly performed. The tendency to the radical operation is the result of the many cases of recurrence of hypertrophy, following tonsillotomy, and the occurrence of tonsilitis and quinsy, and other septic manifestations, in persons who have had this operation performed, showing that the partial removal of the tonsil often fails to give the desired result. Any one who has done this operation often enough has had this experience, as I have.

Of course, if there is regrowth of the tonsil or adenoid tissue some months after an operation, it is invaribly attributed by the ignorant laity (and the best educated laymen are ignorant of medical subjects) to bad, imperfect, or careless work, on the part of the surgeon, and the case is usually taken to another practitionar, and the first operator roundly abused. This is the explanation of why more cases of recurrence are not recorded.

The radical removal of the tonsil (tonsillectomy) is done by different operators in different ways. Each man out of his experience usually evolves his technique, and therefore no one can say that his method is better than anyone's else, provided each does what he starts out to do, viz., remove all the tonsillar tissue. One does it with the knife, another with the sissors, a third with the guillotine, and a fourth with dull or sharp dessectors, or with the finger. I've met one who literally shovels it out from below upwards with a dull Mackenzie tonsillotome. All are equally good if the end is accomplished, but all are not equally easy. The easiest method is to separate the upper anterior margin of the tonsil, in the supertonsillar space, from the anteriorpillar with a suitable knife, to allow entrance for the finger, and then ream its capsule from its bed with the finger nail. When turned out of its bed, the snare, or guillotine without fork, is used to release what you may inaccurately call its pedicle, at its lower border. It is important to keep outside the capsule, which is loosly attached to the areolar tissue; otherwise we will be trying to tear the tonsil tissue, inside the capsule, which is not easy by any means.

I have operated on tonsils between two and three thousand times by various methods, with chemical caustics, and the galvano cautery; with the tonsil punch, the knife, scissors, guillotine and snare. I have done tonsillotomy with guillotine and snare, sometimes followed by the punch to remove pieces left behind, more than any other operation, but have given in my abhersion to the radical operation of tonsillectomy as the most logical one to perform. I now do no other if it is practicable.

Occasionally, I find it difficult to do a radical operation, and must content myself with a tonsillotomy with the guillotine and punch, because the anæsthesia is badly borne, or for some other reason that might present itself at the time of operation.

Again, we meet cases in which it may not be advisable to do a radical operation or any other surgical procedure because of accompanying conditions, or because the patients are unalterably opposed to such measures and yet something should be done. Here it is that I attempt the reduction of the tonsils by the galvanic cautery or by chemical caustics, such as chromic acid, fused nitrate of silver, or carbolic acid, after cleaning out the crypts.

Anaesthesia: In children I as a rule use general anæsthesia, usually chloroform, and in adults local anæsthesia with cocaine applied locally, and by injection of cocaine with a very weak solution. Injection into the tonsil is a dangerous proceeding, except with very weak solutions. from one-half of one per cent to one per cent. In the North ether is the anæsthetic of choice; in the South, chloroform is more used. Deaths are reported from both, but more from chloroform than ether. Ether is probably the safer, but requires more time and is attended with more inconveniences, Chloroform should not be used at all in cases of status lymphaticus.

Accidents: In such a large number of operations it is rational that I should have met with nearly all the accidents that are

said to attend the removal of tonsils. I have, however, escaped the most serious one, viz., a fatal termination. I have never had a death, neither from anæsthetic, nor from hemorrhage, primary or secondary, although deaths from both causes have been frequently reported.

Hemorrhage: I have had profuse and apparently dangerous hemorrhages, two of them requiring ligation of the carotid, and three of them digital compression for five or six hours. We can not always account for the serious cases of hemorrhage, nor have we any indications in advance of its probability. Hemophilia, abnormal distribution of arteries, injury to the pillars, fibroid tonsils, accompanying nephritis, and arterio sclerosis are among the many reported causes. When hemophilia is suspected or proven, the lactate of calcium may be given for three or four days before operation and for several days after.

If the bleeding vessel can be located it can be caught up by clamp and twisted or tied, or local pressure with cotton pads dampened with peroxide of hydrogen; or suturing the pillars and packing the resulting pocket, are all methods used to control the bleeding. If these fail, ligation of the external or common carotid can be done, preferably the external, although it is easier to ligate the common.

The younger the patient the less danger of hemorrhage in my experience, but the operation is sufficiently risky to be regarded as a major and not a minor one, and should be done in a hospital whenever general anæsthesia is used, so as to be prepared for any emergency that might arise. Moreover, it should not be undertaken by any one who has not had sufficient experience to meet these emergencies if they should arise.

When local anæsthesia is used it may be done in the office, but never without a competent assistant to help in case of accident. Two of my cases of dangerous hemorrhage were in adults operated on in my office, one primary and the other secondary hemorrhage and without a good assistant I would have found it difficult to manage the cases.

Habit-Forming Drugs, Their Result and What Shall We Do With the Suject.

By Dr, S. M. Crowell, Proprietor of the Crowell Sanatorium, Charlotte, N. C.

Just in the same proportion that the great majority of human infants are "ushered" into this world, in the same ratio are they "doped" and debilitated by various concoctions labeled "harmless," such, for instance as Mrs, Winslow's Soothing Syrup; Dr. Miller's Anodyne for babies; Dr. Moffett's Teething powder; Dr. Bull's Cough Syrup, and scores upon scores of other such laity enticing agents, many of them insidious, infamous, and calculated to make inebriates, invalids and even paupers of the otherwise normal progeny.

With such factors to interfere with the normal development of our race, is it any wonder that our chief of the bureau of chemistry, Dr. L. F. Kebler, of Washington City, D. C., estimates in his bulletin report, April 1910, that there are in the United States anywhere from one to four million inebriates, or people addicted to the use of habit-forming drugs? Or can we wonder that our present race is growing "weaker," if perchance, wiser?

Recently, commenting upon Dr. Kebler's report, the Charlotte Observer's correspondent, at Washington City, our beloved "Red Buck," said: "One reads and wonders that the mortality record for children is not greater, and that so many persons live threescore years and ten."

Some months ago, while in Charlotte, to lecture to the North Carolina Pharmaceutical Association, I had the honor of meeting Dr. Kebler, the government official referred to above, and conferring with him upon this subject, and I feel honored to be able to quote him, personally, by permission, as well as to have the privilege of using his data in the bulletin mentioned above, which is as follows:

"Notwithstanding the fact that legislation, federal, state, and territorial, adverse to the indiscriminate sale and use of opium has been enacted during the past decade, and most physicians are using greater circumspection than formerly when prescribing opium, its preparations and derivatives, the amount of opium (exclusive of smoking opium which is now denied entry) consumed in the United States, per capita, has been doubled within the last forty years.

Not only has there been this increased consumption of opium, its preparations and derivatives, but large quantities of other habit-forming agents, introduced chiefly for medicinal purposes, have been used. For example, cocaine has been used for about twenty-five years, and the amount consumed at present is estimated at approximately 150,000 ounces per annum (and, personally, I believe this figure is too low an estimate, for the negroes, in imitating his white neighbor, has gone to using it promiscuously as a "sniffling" powder which makes paupers, thieves, rob-

*Read before the Seventh District Medical Society of North Carolina, Charlotte, N. C., Dec. 6, 1910.

bers, and right here in Charlotte, many purse-snatchers, jeopardizing the money and lives of our wives, children, and poor working-girls, as well as to put our city government at a greater expense. In fact, I have been recently informed that one traveling salesman, alone, sold to one dealer 500 ounces of cocaine in one order. This seems almost criminal, when we realize how little cocaine is used, legitimately, by the medical profession.

I have ofted visited our police courts in order to study the cocaine subject in this city, and it is no uncommon thing to see the officers exhibit, on trial of negro offenders, of one or more ounces they are supposed to be using as well as "peddling out" to addicts of their race.

In addition, it is well known that large quantities of acetanilid, acetphenitidin, antipyrin, phenacetin, caffein and chloral hydrate, and smaller quantities of codein, dionin and heroin are consumed.***

Under the head of "soothing syrups, baby syrups, colic cures, children's anodynes, teething concoctions, etc.. perhaps many physicians have long suspected that such contained harmful agents, however, as they are labelled "harmless," mothers are not aware of their harmful effects, and as a rule, use the "dopes" without consulting the family physician, and as a consequence, many, many, poor innocent children are thus ruined for life, and, in fact, many deaths annually occur from prescribing these concoctions by mothers, nurses or other members of the family.

In this connection, I will state, by special permission from Dr. L. F. Kebler, that he firmly believes (as stated, also, in his recent lecture in Charlotte) that the health of a member of a family of his acquaintance was seriously impaired, for life, on account of the indiscriminate administration of a certain preparation of opium (paregoric) while it was an infant, the child now being perhaps, 14 years old, if my memory serves me correctly. He stated that this child seems to have an insatiable appetite for stimulants, anodynes, etc., while none of the other children are so constituted—in fact, being adverse to the use of this special class of drugs.

In my opinion, due to the indiscretion of parents, nurses, guardians and others, there are in our country thousands of "children" affected as the above cases reported by Dr. Kebler. These various harmful preparations are well known to physidians, but, as a rule, not to parents.

Dr. Kebler further says, "It is hardly believable that anyone, for the sake of a few dollars, would concoct for infant use a pernicious mixture containing cocaine, but several such mixtures have been found during the last year. One was offered for importation, under the name of Espey's Syrup for Children's Dentition, which contained one-half a grain (½gr.) cocaine hydrochlorid to each bottle of about an ounce."

Leaving the dear little infants to the keeping of the lowly Nazarene, who said: "Sufler little children, and forbid them not, to come unto me: for of such is the Kingdom of Heaven." I now pass on to grown-up men and women, who, after jeopardizing the lives of these little ones, as per above, impair their own health and usefulness, by becoming addicted to various drugs and compounds, and at the soda fountains, to make myself best understood, I can do no better than to quote, again, Dr. Kebler. and in this connection, he says: "During the last twenty years a large number of soft drinks, containing caffein, and smaller and greater quantities of coca-leaf and cola nut products, have been placed upon the market as harmless beverages, yet are most dangerous to health and life,"

"A number of so-called softdrinks now on the market contain both of the habit-forming agents, cocaine and caffein. It is not uncommon to find persons addicted to the use of medicated soft drinks. It is also a well known fact that many factory employes, stenographers, typewriters, and orhers, subject to mental or nervous strain, spend a large part of their earnings for drinks of this character."

"It is well known that parents, as a rule, withhold tea and coffee from their children, but having no knowledge of cocaine, caffein, or other deleterious agents in soft drinks, they unwittingly permit their children to be harmed by their use."

"It is known that very small amounts of morphine or cocaine or even the suggestion as to their presence, will tend to destroy the equilibrium of reformed addicts and bring back the former craving."

Departing from the above data. I now wish to pay my respects to the so-called home-habit-curing remedies, or mail order cures, and their allies which are as numcus, nefarious and pestiferous as the plagues which followed Pharoah's army.

Dr. Kebler says he has discovered at least thirty different varieties of these "home" cures throughout the United State, and that they are sent indiscriminately into any home, although some of them contain sufficient poison to kill a dozen * * * and that some of the promoters themselves have little knowledge of the dangerous character of the mixtures they are handling. For example, it was found that one of these treatments, handled by a groceryman who had neither medical nor pharmaceutical

knowledge, was distributing to anyone asking for it * * * and furthermore, it is well known that the drug addict is incapable of treating himself, the chief object of this practice seeming to be to extort money from the unfortunate victim, who in many instances, continue the treatment over a period of years."

I have seen in my own practice quite a number of opium and other narcotic hibitues who became addicted to the use of these "Home-cures," in their effort to get "rid" of the original drug, or compound, and some of these have come to my Sanatorium with the most violent case imaginable, of toxic, or acute drug delirium.

Practically all of these "Home-opium cures consist, principally, of morphine in varying amounts, combined with Cannabis Indica, Hyoscyamus, the bromides, etc. which compound is far more injurious to the patient than the morphine itself. The same is true of the many "three-day-whiskey-morphine cures" which we see so promiscuously advertised in our daily papers, and private letters to the medical profession.

Again referring to a new phase of the cocaine habit, briefly, I will be done, and this is from on extract in the Naval Bulletin by Past Assistant Surgeon, W. D. Owens, U.S.N., on duty with the legation guard at Pekin, China, in which he says that during the past eighteen months, twenty enlisted men addicted to the use of cocaine have come under his observation, and that in the month of January, last, no less than six privates of the Marine corps, serving with the legation guard, were reported as "incapacitated" for duty and required special attention beyond the treatment of the surgeon of the post.

Dr. Owens says that within five or six months after beginning to use cocaine, these addictees become mental degenerates, not infrequently developing temporary insanity, and that the habit is seriously impairing the naval service, and of course this same condition exists in the men of the army service.

It is a matter of interest in this same connection to state that recently in a memorial presented to the throne by one of China's viceroys, the attention of the Government was called to the fact that since laws had been established restricting the sale and use opium, the Chinese, in large numbers, were finding consolation in cocaine.

Now, gentlemen, we who are best fitted, from our knowledge of the subject, to suggest some remedy, watch and protect the public health; what shall we do to care for the inebriates now on hand, and to remove the factors causing inebriety?

In the first place I would advise the establishment of a place of treatment by each county, or city, for the indigent, or poor inebriates, perhaps in connection with the county home, and would place a band of restriction on the manufacture and sale of these dangerous preparations by anti-narcotic legislation and publicity, and to accomplish the latter, exposure of these compounds must be made by the medical profession, instructing their respective clientele as to the danger in these preparations.

In other words, we must accomplish this huge task, largely, by an educational campaign in reference to checking the tendency to narcotism.

"Lest We Neglect"*

By Dr. Chas, O. H. Laughinghouse.
Greenville, N. C.

A composite audience, made up as is this of devotees to all the branches and phases of medical life; about to be addressed by a country doctor, without claim to proficiency, is to be felicitated, in that the speaker though possesing nothing else, has at least an appreciation of a medical societies personnel and time sufficient to spare it the constraint, incident to a paper that for the lack of a better name might be callsd a text book clinic.

I have been a frequent attendant at society meetings, and have been compelled while there, to listen so many times to the minutae of the temperature, pulse and respiration of an uneventful Typhoid Fever, and have had my soul harrowed, so near the limit of control,—by the dramatic description of the primipiraes waning pains, —and have seen the abdomen opened so often with the usual antiseptic precautions;— that I have decided to leave my clinical experiences at home, and direct your attention to just a thought. A thought expressed by a warning adage, so old, that it's origin goes back to where the memory of man knoweth not; but not too old to be frequently and forcibly impressed upon all of us,—the wisest as well as the weakest. Would that my wisdom, example and gift of speech were sufficient to keep constantly, and pre-eminently in your minds the adage, "Lest We Neglect."

As late as the Nineteenth Century, ten per cent of Englands people bore the marks of Small-Pox. North Carolina had a thousand and more cases of this disease during the year 1909,—and I have data to show that the old North State is not better or worse

*Read before the Seaboard Medical Association at its meeting in Kinston, N. C., Dec, 1 1910.

than is Virginia and South Carolina.

Germany taking advantage of Jenners gift of the world, has by systematic vaccination and revaccination, rendered her people immune, proven by the fact that no case of Small-Pox has occured within German boundaries in the last few years, barring those imported. What is the matter with us? The State has a compulsory vaccination law, so constructed as to put the burden of it's enforcement on her physicians. The educational forces from the country school teacher, "God Bless Her" to the State Superintendent of Public Instruction, are persistently forcing vaccination by leading pupils and parents into a knowledge of it's necessity. If every individual doctor, backed up by every other doctor with whom he touches elbows, would issue the ultimatum, that vaccination must be had,--Small-Pox obituary would be written. Are we neglecting this?

Pasteur and Lister's dynamo to medical progress, has made limitless the confines of Surgery, by enabling us to enter with safety those portions of the body on which hitherto had been written—"Abandon hope, all ye who enter here." Yet, I knew a furuncle incised with a scalpel, previously infected by use in a case of Phlegmonous Erysipelas to inoculate and kill one of North Carolina's foremost jurists,—and this was done by the hand of a licensed doctor.

None of us would refer our Abdominal or Cerebral cases to a surgeon, who was not manualy, mentally, yes, antomically proficient in Asepsis, yet, some physicians will habitually do minor and oft-times major surgery with no thought of Asepsis other than a Bi-Chloride Tablet, in a dirty basin, filled with dirty water.

The proper observance of the Hygiene of Pregnancy, coupled with Asepsis in the management of Labor, has wrested from childbearing most of it's danger, and much of it's mental anguish, yet, many men who very properly hold up their hands in horror at the thought of Criminal Abortion, will with their own fingers, neglectfully produce Peuperal Infection, invalidising and sometime killing the good women of our land. What a sin against the profession, against motherhood and against God. Neglect, neglect, exasperating, lazy, unpardonable neglect, that neglect which is responsible for most of the crime committed against humanity in the name of medicine —explains the disease and death following the wake of the child-bearers of to-day.

While the Germ-Theory has lifted Surgery and obstetrics from the sphere of the mechanic, and made them guiding stars in the firmament of science, it has not done less for the infectious diseases. It is the very life of that great movement whose power is conscripting men and women from every condition of society and organizing them into a world wide army, that in hamlet and city is preventing the Great White Plague. North Carolina has a Laboratory of Hygiene that examines not only sputum, but blood, feces and urine free of charge, there-by giving the key to early diagnosis, the sine qua non of treatment and prevention. The State has also a Sanitarium for Tuberculosis, operated for the purpose of teaching, not only the banker, but the beggar,—the secret of protecting himself and others against this disease. Are we using these institutions in our personal work? Are we making their existence and their purposes common knowledge in our own communities. Are we convincing folks, ignorant folk, folks that cannot be taught except by word of mouth,—that consumpiton is contagious and that a few simple practices tend to it's prevention?

Tuberculosis enjoys the distinction of holding first place in the death rate of the world, but if the graves of the little folks alone were counted,—Consumption would yield her leadership to Whooping Cough and Measles. Parents are still converts to the erroneuos belief that these diseases are the rightful privileges of childhood, and many deplore when their children are fortunate enough to escape. Dr. Cromin of Now York maintains that in a school population of 650,000, thirty per cent. of the children were two years behind their proper classes, and that ninety-five per cent. of these backward children, were so, because of defects of eye, ear, nose and throat. Have you ever thought how constantly the infectious diseases of children affect the special sense? Are we forgetting the sacred and patriotic service due these children, there-by neglecting the very hub of vitality's conservation?

I can not pass infectious and contagious diseases until I bring to your minds the lusty youth who comes to us, rather proudly, exhibiting his first cases of Gonorrhoea. Do we convince him of his condition? Do we caution him lest he render helpless her who would be his helpmate, and render sterile her who would the mother of his children?

In spite of the lethargy of the medical Profession,—North Carolina has increased her appropriations to Public Health from $100 in 1877 to $8000 in 1909. The Legislature gave us in addition, Free Diphtharia Antitox—in for the indigent, improved the usefulness of the State Laboratory of Hygiene, passed a vital statistics law, completed and is maintaining the Tuberculasis Sanatarium at Montrose,

The Medical Society of the State has appointed a Joint Committee on public policy and health Legislation,—who hope to procure from the next Legislature and increase of the appropriation to Public Health from 8000 to 25,000 dollars, and in addition a strong effort will be put forth to make the State High School Certificate or it's equivalent a preliminary requirement, to the examination for license to practice medicine in North Carolina. The Legislature meets in January,—"Take Heed Lest We Neglect" not only to inform but to convert our own individual legislators, to those and others of the State's Sanatary Needs.

These thoughts may appear peurile to the minds of men who have their attention taken up with what they deem greater things, but he who prevents pus, renders a service just as dignified and greater, though less spectacular, than he who successfully evacuates it. He who prevents infection and contagion, is worth more to the world, than the great army of physicians who feast on preventious neglect. He who takes a crippled child and removes from his development, the shackles of disease, renders a service worthy of the Hosannas of not only men but angels.

It is said that general practice has been gradually encroached upon until it has dwindled into nothing more than a directory, pointing the way of disease to the various specialties, but to the physician with an energy and a conscience that will property respond to the adage, "Lest We Neglect," the field of general practice has in it enough and more to tax the strength of Sampson, the wisdom of Solomon, the patience, the goodness and the greatness of the Man of Gallilee.

A man once left his home in quest of silver, time brought him back weary and hopeless from a fruitless search. To his surprise in wandering through his long deserted house, he found the knobs on all it's doors wrought from sterling silver. Look for opportunities to satisfy your ambitions, and realize your ideals and you will find them right at home. Your own community, that is the field in which to spend your strength.

Pasteur could not have changed an art to a science, Koch could not have shown the power of his Bacilli, Reed could not have rid Cuba of the scourge of Yellow Fever, Gorgas could not change Panama from a quagmire of of disease, to a sanatary land of wealth and beauty, Bering could not have saved thousands from Diphtheria, Stiles would not be checking the ravages of Hook-worms. The Legislature of North Carolina will not have the knowledge or the nerve to vote sufficient appropriations to sanatation, but for the family doctor in his own little neck of the woods, practicing Asepsis, teaching the contagion of Consumption, procuring pure water, correcting soil polution, preaching the value of drainage, forcing the use of screens, injecting Antitoxin, giving Thymol, convincing his own legislator that appropriations for the advancement of medical science are not only contructive, but economical, glorious, and immediately necessary.

"Honor and fame from no condition rise,
Act well your part, there all the honor lies."

Some Remarks as to The Science of Medicine And a Comparison of Ancient With Present—Day Progress Of The Same.*

By Dr. C. M. Van Poole., Salisbury, N. C.

GENTLEMEN OF THE 7TH. DISTRICT MEDICAL CONVENTION:

When I consented to come to Charlotte to attend this meeting it was with the understanding that but little would be expected of me, and then it was not until repeated requests had been made by your worthy Councillor, that I agreed to do so. You will understand, then, that it is not of my own volition that I appear before you today, and I sincerely regret that one better qualified has not been selected.

I want to congratulate you, gentlemen, that you have decided to hold this, a District Convention, for it is a step in the right direction, a step that will have a great deal to do with the future success of the work of your district. There is no good reason why a similar society should not be organized in each of the ten districts of the State. I attribute the holding of and whatever success attends this meeting to your live, energetic Councillor, and I regret that as much cannot be said of every Councillor in the State.

There are many reasons why these district meetings should be held, for we all need to intermingle with each other more and inter change ideas concerning this, the noblest profession or calling, save the gospel ministry.

The science of medicine, like every other science, consists of an accurate knowledge of facts duly systematized. But the facts in medicine differ, somewhat, from the facts of other sciences, in the fact that they are largely empirical. While many other branches of knowledge have been enlarged by purely inductive reasoning and scientific theorizing, no single fact in medicine can be said to have been thus discovered or

*Read Before the 7th District Medical Society of North Carolina, Charlotte, N. C,, Dec, 6, 1910.

established, but has only been discovered and established by long continued and oft-repeated observation. As Prof. Lynch would put it, "It is the accumulated experience of successive generations of persons who have practiced the art of medicine." But, you are saying, does theory then hold no place in the true science of medicine? And are all the beautiful theories which we heard during our medical course and of which we have been reading ever since we began the practice of medicine mere brutum fulmen, or, as the lawyers put it, ultra vires, and signify nothing? I answer, no. Theory or speculation is always admissible to explain facts whose cause we do not understand, or as Humboldt expresses it, "speculation is always admissible in the absence of accurate knowledge." And so in addition to our knowledge of our store of empirical facts, we have many theories which have been mostly invented to explain those facts. But, while our facts are solid and unchangeable, our theories are ever changing from generation to generation, as some newly discovered fact proves a former theory to be untenable. Theories in medicine, then, are not and should not, be taught or accepted as absolutely true, but only conditionally so, as affording the best explanation within our reach, of observed facts. Many of the theories which are to-day accepted as true, will doubtless be exploded in a subsequent age as we have exploded many of those of our predecessors.

But, you may, ask, is there no true theory of medicine? I answer, yes, there is, there must be. But, as medical science deals especially with that unknown, and possibly unknowable quantity—life, we are necessarily, in many cases, still groping in the dark and anxiously looking for the dawn of that purer and better light which will ultimately guide us through the intricate maze of obscurity and doubt which still beset us. I have full faith in the ultimate mission of our noble profession, and an abiding confidence in the final success which must meet the strong minds and brave hearts that are now everywhere wrestling with the problems of life both in health and disease.

When I tell you that many of our theories in medicine are possibly false, I must also tell you that they are sometimes so because many of the so-called facts upon which they are constructed are also false. Medical facts—or at least those which we are in the habit of receiving and accepting as such, differ, as I have already said, from the facts of other sciences, because they are not always susceptible of physical or mathematical demonstration. It will be well, therefore, to remember that the amount of credence to be yielded to an asserted fact in medicine, depends upon the ability and credit of the observer, since it is mostly by observation and not by demonstration that medical facts are to be established.

It is true the science of medicine is at present making rapidly strides towards perfection, or, as nearly so as is possible to make it. It is also true that its progress has been tedious and necessarily slow. A brief reference to its history would show how slow this growth has been in the past, and, with your permission, I will, in as few words as possible, show under what difficulties and disasters it has laboriously worked its way upward from the realm of barbarous superstition into the bright light of science. It will also show what have been its solid and useful achievements, and, under what obligations it has placed and is still placing humanity in the past and in the present.

The earliest records of the human race prove that men, even in the first dawn of civilization, sought to find out means of relieving and curing the diseases to which they were liable. This fact is established, not only in the history but even in the mythology of the Greeks, Phoenicians, Egyptians and other ancient races. But it is only since about 400 years before the Christian era that medicine could make any claim to be considered a rational science, at which time Hippocrates—to this day styled the father of medicine—gathered the scattered fragments of knowledge then extant, enriched them by his own acute observations and transmitted them to posterity in his writings. Others took advantage of his teaching and, through their efforts, soon human dissections were legalized and recognized as a science of dignity and importance, and reached its highest cultivation and perfection in the celebrated school of Alexandria. To their great credit, be it said, the succeeding caliphs atoned, in some measure, for the barbarism of their predecessors.

For a time it seemed that the science of medicine would be universally recognized, but such was not the case. The Mohamedan power broken, their great scholars no more, the patronage of the illustrious calips no longer enjoyed, dreary centuries of ignorance, superstition and priestcraft succeeded.

As an evidence of the very tardy progress of medicine of those dreary centuries, it is said that for nearly fourteen hundred years Galen and Dioscorides were the only medical authorities of Europe.

Light at last beams upon this Cimmerian

darkness and the glorious old Padua begins to shine out, a single star "glittering upon the brow of night," and soon, uneer the patronage of Frederick Barbarossa, becomes the acknowledged source of medical knowledge throughout the world. Succeeding German emperors continued his enlightened policy and, step by step, this great science was allowed to occupy its deserved place in the higher schools of learning.

Ambrose Pare, laid the foundation of surgery; Servetus discovered the pulmonary circulation, which Harvey soon supplemented with the Systemic; the lacteals were discovered and, the microscope coming into use, the minute anatomy of the glandular structures was pointed out; Willis traced the course of the nerves and localized the functions of the brain. In a word, medical inquiry and physiological investigations were excited and sustained by able and enthusiastic minds, and medicine in Europe, redeemed from ignorant empiricism, was elevated into the dignity of a rational science, and placed upon a sure philosophic foundation.

Many important discoveries and inventions have been made; surgery has been revolutionized; materia medica is replete with its numberless remedies; vaccination, the antitoxines, galvanism, the X rays, the stethhscope, the laryngoscope, the ophthalmoscope and many other valuable aids have been added and are indispensible, but, of all additions to our armamentarium, nothing has been so useful and done so much to advance the scienca of medicine as the microscope. It has revealed to us the secret of many physological processes and brought to light the heretofore unknown causes of many pathological actions. It has made possible the cellular pathology of Virchow which has taught us how we live and grow, and how and why we are sick, and brought us very near to the real secret of diseased action.

Many of the above, together with other improved methods of treatment, with the products of chemical research are some of the achievements of the last century, and speak, in trumpet tones, the rapid strides of progressive medicine. The list of the solid advances of our science and of the obligations under which it is placing the human family, might be almost indefinitely lengthened, for every day is adding some new claim founded upon some new gift of science, some new boon conferred; but enough has been said to redeem the boast that this century is far transcending all previous time in medical discoveries and advancements.

When we recall the noble aims and purposes of our glorious science; when we see its faithful votaries searching nature's arcana for truths and treasures to add to its store; when we remember the long line of brilliant names emblazoned on the pages of its history, from the sage of Cos down to its trusty sons of the present, whose names lend dignity to the science, and give assurance to the world that the accumulated wisdom of ages will receive fresh accessions from their labors; when we see its monuments in all the civilized world, its temples adding beauty and grandeur to every landscape, we feel that we can smile at all the malevolence of its enemies and any misconstructions of its friends.

What though quackery and empiricism flourish for the hour, why heed the puny efforts of homoeopathy, ostoeopothy, Christian science and their kindred delusions to direct the stream of science from its accustomed channel, or to stem the mighty current of its perennial springs and accumulated waters?

True science rears its columns high above the creeping things that crawl around its base. The names carved upon its monumental granite stand out as sharply as ever across the centuries, defying all the puny efforts of sciolists and isms and pathies and self styled reformers to deface them. Their mad flight against the imposing columns of true medicine but insures their destruction, as like,

The feeble sea birds, blinded in the storm,
On some tall light house dash their little form
And the rude granite scatters for their pains
Those small deposites that were meant for brains.
Yet the proud fabric in the morning sun
Shines all unconscious of the mischief done.
Still the red beacon pours its evening rays
For the lost pilot, with as full a blaze;
Nay, shines all radiant o'er the scattered fleet
Of gulls and boobies brainless at its feet.

Intestinal Protozoa In North Carolina,*

By Wm. Allan, A, B., M. D., Charlotte, N. C.

The present campaign against the hook worm will accomplish a great deal more than the eradication of this pest—it will bring to the attention of the profession in the South the entire subject of helminthiasis, which as Brown (1) says, has never received the consideration its importance demands.

Of scarcely less importance in tropical and semi-tropical countries are the intes-

*Preseuted before the North Curolina Medical Scciety, Wrightsville Beach, June 21, 1910.

tinal protozoa: indeed it has been said that in the tropics amebiasis is the white man's worst enemy, and it can no longer be doubted that this so-called tropical disease is a serious problem in this State.

Two of the four classes of protozoa are well represented in North Carolina. Of the Sarcodina or Rhizapods, amebæ are endemic (2) and are encountered almost every day. Of the Mastigophora or Flagellates, monads (3) are even more common than the amebæ. The intestinal sporozoa (coccidida) have not been reported from this country, so far as the speaker knows. Of the Infusoria or Cilliates, ballantidium coli has been reported from this country (4) but not from this State. The speaker expects to encounter this parasite within the coming year.

Until two years ago amebiasis was unrecognized in Mecklenburg country; since that time the speaker hae encountered 70 cases After tuberculosis and typhoid fever it is the most serious problem with which the profession has to deal in Charlotte; in the year 1908 the total reported deaths from typhoid in Charlotte numbered 7; during the same period the speaker saw 8 deaths from amebiasis. Thus the immediate death rate from this disease when unrecognized and improperly treated is high, and as an indirect cause of death predisposing to tuberculosis and typhoid, it ranks second to none in efficiency, and second only to the hook worm disease in incidence

Of the 70 cases seen by the speaker, 13 have died; 11 from dysentery, 1 from liver abscess (5), and two from other causes. No deaths have been seen from amebiasis among 58 new cases during the past year.

A negative history of diarrhea is utterly worthless; 37 of these cases were without frequency of bowel movement.

In 54 cases in which hæmoglobin was estimated 27 were above 80 per cent. and 27 below this, showing a pretty constant and at times severe anemia.

The speaker believes that in a considerable percentage of cases of uncomplicated amebiasis a moderate eosinophilia is present, despite the statement of Strong (6) to the contrary.

In 49 uncomplicated cases in which this point has been noted, 23 have shown more than 5 per cent. eosophiles, 4 between 4 per cent. and 5 per cent., and 21 below 4 per cent.

In 13 out of 44 cases a bald tongue has been present, which the speaker is unable to distinguish from that occurring in pellagra. (7) In a number of cases also the corners of the mouth were dry and eroded (8).

In this connection it is interesting to note the number of pellagrins who have amebæ in their stools, as observed by Siler and Nichols in Peoria (9), and by thes peaker in Charlotte (9); since the conference on pellagra last November, the speaker has had the opportunity of examining two additional cases of pellagra, both of whom showed amebæ in their stools.

The occurrence of Trichimonas vaginalis alone is extremely common and apparently of no significance, though many of these cases have a mild degree of neurasthenia. But the high per cent of cases in which these monads are associated with amebae is rather striking; this occurred in 38 out of of 64 of the cases under consideration. It seems impossible to eradicate this monad; the stock in which it is found, in the experience of the speaker, have practically always been alkaline, though Brown says this parasite requires an acid medium. (10). The amebæ also lives in an alkaline medium and causes alkaline stools. It would seem then that these chronic monad carriers are always in a suitable conditions for amebic infection, and that of the people in whom the ameba is able to take up its abode permanently, a large part would be composed of those carrying the Trichimonas, which may provide or which at least demonstrates the presence of a suitable environment.

The speaker has not yet encountered in man the other common monad, Cercomonas hominis; but recently in a number of autopsies on rats (mus norvegicus), in almost every instance monads were obtained from the caecum corresponding in all appearances to the Cercomonas hominis (one flagellum, no membrane, etc.) So that it would not be surprising to find this parasite here as it has been reported by others in this country (11).

Recently a case of Lamblia intestinalis was encountered in the dyspensory of the North Carolina Medical College, which the speaker has reported elsewhere.

It only remains then to observe Balantidium coli in order that North Carolina may claim as native all of the more important intestinal protozoa that are parasitic in man.

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Nervous Reactions in Connection with Diagnosis.

By L. N. Glenn, Gastonia, N, C.

Nervous reactions for their proper accomplishment, require a complete reflex arc made up of an afferent sensory nerve or dendron, a ganglion and an efferent motor nerve or axis-cylinder. Afferent impulses normally produce efferent responses Any break therefore in the reflex arc necessarily interferes with the efferent response. Likewise any pathological condition of any portion of the reflex arc diminishes the response in proportion to the extent and location of that pathological condition.

Again, the response largely depends on various other factors as age, sex, race and general conditions of subject; primary or secondary stimuli of dendrons, paucity or abundance of nerve supply to particular locality, whether or not the patient has had a sedative or an excitant. Inhibitory influence then must be given due consideration also. Stimuli applied to the senile dendrons of the aged or very infirm individuals fail to elicit the keen ready response noted in the active nervous system of a healthy youth.

Secretory reactions are also very true in response to rhe parent stimuli as the salivary and gastric glands are ever ready to pour out their respective secretions upon the slightest provocation.

Likewise certain secretions are inhibited by reactions from depressed mental conditions as the digestive fluids or the flow of milk may be retarded by such emotions as grief, anxiety, fear, etc., and even the quality as well as the quantity of milk modified.

The prick of the needle or the application of heat or cold to the body of an individual is not attended with the ready reaction that follows the same stimuli applied to me more numerous and sensitive nerves of the finger tips or lips of the same individual.

The ice bag applied to the head reflex excites vaso-constriction and consequent lessening of congestion and temperature rather than by direct cooling.

The buoyed-up intensely anxious patient often suffers actual prostration or even collapse when he awakes to the full realization of his condition and the grief and anguish of blasted hopes.

The outward manifestations of many a patient would be far more intelligently treated, could we but fully interpret and understand the various underlying conditions which reflexly produce them. It is superfluous to remind you that often your keenest anticipations of Saturday's, for your patient's physical welfare, have vanished by Monday in response to the reflex effects of too much Sunday company.

These few facts then should lead the careful, conscientious physician in his examination of the sick, to look beyond the superficial objective symptoms met with, and partake of the certain enlightenment which awaits him upon the proper interpretation of the then various active reflexes. In the hurry of professional life, I feel that many of us may be too prone to jump at conclusions and mistake reactionary conditions—to treat effect rather than cause. Most of the various manifestations of pains, headache, toxæmias, uræmias, etc., are not to be treated as idiopathic conditions, but should be interpreted as reflex manifestations of obscure disorders, which could frequently be made clear, by closer observation, and their real cause treated.

Nature is only too true to herself to allow the feigning imposter even to go undetected by an intelligent observer—her reflex reactions are only too true to their etiological stimuli.

To sit even for a short while by a patient and closely watch and interpret his various acts often means to be able to recognize his true condition, to treat him much more intelligently and obtain far better results. Study the child whose every act carefully watched often tells you far more than the mother can, and not infrequently brands her positive declarations, though innocently and conscientiously made, as false.

Errors of Diagnosis With Some Reasons Therefor.*

By W. T. Mitchell, M. D., Shelby, N.C.

The lack of Doagnostic ability among the great mass of physicians is, to my mind, one of the weaknesses of our profession today. Any physician who will take a retrospective view of his professional career must be struck with the many unnecessary and inexcusable errors of diagnosis.

*Read Before the Southern District Medical Society of North Carolina, Charlotte, N. C. Dec. 6, 1910,

Mistakes of Diagnoses are not confined to any particular class, but are often made by the best equipped men in the profession. In a recent artical by Cabot, of Boston, on Mistaken Diagnoses, the fact is revealed that in an analysis of one thousand cases in which the clinical diagnosis was compared with the findings at the autopsy, a correct diagnosis was made in only about 60 per cent of all cases. When it is remembered that this study was conducted in one of the best Hospitals in this country with all the modern methods for making a diagnosis at hand, the percentage of errors is surprisingly large. The fact is, we all make mistakes, and it is with a view to calling attention to some of the reasons therefor, and also to make a plea for more accurate and painstaking work that I am offering this short paper.

In the first place, our medical colleges are not without blame in this matter, for in my opinion they have and are still laying too much stress upon theoretical teaching and laboratory methods to the exclusion and neglect of bedside instruction. I do not wish to be understood as decrying theoretical and laboratory teaching, for they are essential and no class of men within the last two decades have done more to advance medical science than the scientific laboratory worker, but I insist that in order to make good diagnosticians, students must have more bedside instructions and be allowed to handle and examine patients with their own hands.

As much as I believe in theorettical and laboratory instruction, I am persuaded that the tendency of our colleges is to refine too much along this line while the student is neglected in that practical clinical work which will enable him to successfully recognised disease when thrown upon his own resources. Granting that laboratory diagnosis has done much confirm and clear up obscure cases, I still insist that the general practitioner may become proficient in the act of detecting disease without being an expert bacteriologist. On the other hand, how often do we see graduates from our best institutions, who perhaps are skilled microscopists, yet display the most deplorable ignorance about the clinical course of some of the most common diseases. As has been well said, there is too much teaching at long range. It is all well enough for students to sit in an amphi-theater and listen to the learned professors discourse at length upon the various diseases, but it would be better and of much more value to them if they were brought directly in contact with patients and given more practical training in examining the sick and noting the different phases and changes that occur in the course of disease. Any one who has made occasional visits to our medical colleges must have noted the eagerness and rapture with which students will gaze for hours upon major surgical operations, yet they have little time to devote to those minor surgical diseases which they will be called upon to treat at every turn in private practice.

As a result of all this kind of teaching there are being turned out of some of our most noted instiutions a class of men who are well posted on bacteriology, but who are more or less unfitted for the general practice of medicine and surgery. Consequently, we see so many graduates either taking up post graduate work, or seeking hospital appointments in order to get that practical training which their college failed to give them.

The chief responsibility, however, for so many faulty diagnoses, in my opinion, rests very largely upon the physician himself, and is not due so much to his ignorance as to his neglect to make careful observations and painstaking investigation of patients intrusted to his care. Every physician may not become a skillful diagnostician, but there is absolutely no excuse for the hurried and careless manner in which we attempt to arrive at a correct conclusion about disease.

The power to make accurate observation is one of the greatest assets a physician can possess and there is nothing that will prevent us from falling into error quite so much as by keeping patients under close observation until sufficient time has elapsed to enable us to arrive at a correct conclusion. It is often highly important both for our own reputation as well as the welfare of the patient to make an early diagnosis, but no phyiscian should ever permit himself to be forced to hurried and erroneous conclusions, under pressure of the patient or his friends.

The laity are always urgent and impatient, and often expect us to make a diagnosis, as it were, by intuition, but fortunate is the physician who has the nerve to bide his time and resist unreasonable demands until the clinical course of disease and a searching investigation will justify him in forming his conclusions.

It is not my purpose, in a short paper like this, to enumerate at length the errors into which we so often fall, but will let it suffice to call attention to a few of the most important and far reaching in their consequences.

In my judgement the failure to diagnose tuberculosis, and especially in its incipient stage is one of the most common errors. And there are many reasons why this is

so. One of the chief difficulties in the way of an early discovery of tuberculosis is due in part to the general ignorance of the laity in regard to the disease. They still have an idea that it is impossible to have tuberculosis without cough, night sweats, high temperature and rapid emaciation. Consequently, the physician is not consulted until the disease has advanced to the second or even the third stage.

This idea of the people has, in some measure, been fostered by the profession, for if all the cases of tuberculosis that have been dismissed by the physician as mere colds could be gathered together, they would have made a "multitude no one could number."

With such erroneous ideas in the minds of both the profession and the laity it is no wonder the great white plague claims one victim out of every seven. Even when we have the most intelligent conception of the disease, we must exercise great care and good judgment if we would avoid mistakes, and this is especially true in these cases where there are no symptoms referable to the lungs nor tubercle bacilli to be found in the sputum.

It is in cases of this character that we make our greatest mistakes for we fail to keep the patient under our observation a sufficient length of time to either establish the diagnosis or to satisfactorily explain the symptoms. There are other cases characterized by chilly sensations and a daily rise of temperature, with no cough which may lead the physician into error of making a diagnosis of malaria. I have seen a number of mistakes made by reputable physicians and always with disasterous results for the patient.

The importance of an early diagnosis in tuberculosis cannot be overestimated, and if we would realize the importance of making a thorough and searching investigation of all cases that deviate in the least from the normal in weight and appetite with loss of strength will do much to hasten the glad era when this terrible scourge will be driven from the earth.

Our mistakes in diagnosing diseases of the joints and bones would fill a volume alone, and are in many cases thoroughly discreditable to the profession. The abominable and erroneous habit which so many physicians have fallen into of diagnosing all kinds of surgical joint diseases as rheumatism is not only to be condemned, but is well deserving of reproach. So fixed has this habit become of calling everything rheumatism that the laity, taking the cue from the profession, are often found making their own diagnoses and treating their own case.

As usual when we make mistakes, some one has to suffer, and there are no exceptions in these diseases, for every community has its cripples among both the young and the old who, laboring under the impression that they have rheumatism are dragging through life with chronic surgical diseases of the joints that might have been cured had a correct diagnosis been made and proper surgical treatment instituted.

Diseases of children perhaps furnish the most fertile field for the mistakes of the general practitioner than of any other department of practices. In this realm teething and worms have borne the brunt of the ignorance of the profession. We have all at times applied the adage of the Pedriatric specialist, "that when we have the signs of bronchitis although the patient is obviously too sick for simple bronchitis, call it broncho-pneumonia." The reason we make so many mistakes in treating children is not so much because of carelessnesses, but rather to our ignorance of the subject. The average physician devotes entirely too little time to the medical and surgical diagnosis of children's diseases, for the reason that he looks on this kind of practice as not only difficult, but somewhat apart from the general practice of medicine.

Upon the early recognition of many of our most prevalent diseases depends ths weifare and happiness of our patients. A failure to do so may result in a wretched and crippled life, or an untimely death. With the widespread prevalence of tuberculosis, and with cancer on the increase, both of which may be cured, if discovered early, the responsibility of the general practitioner cannot be too highly emphasized, for it is to him these patients first go seeking relief, and upon his skill in detecting disease depends the issue of life or death.

Again in those acute abdominal diseases where delay in surgical intervention of a few hours, or a day at most, may mean a fatal termination; students should be taught above everything else, that diagnosis is of supreme importance.

What the profession needs today is not more investigators, but rather more clinicians, that have a practical acquaintance with disease and who are able to apply their knowledge to the alleviation and care of the sick.

It has been said that it would utilize and put into practice the knowledge that we already possess concerning disease, that if we would utilize and put into practice the knowledge that we already possess concerning disease, that fifteen years at least could be added to the averae human life, and that more than half this additional life would come from the prevention of tuber-

culosis, typhoid fever, and five other diseases, the prevention of which could be accomplished by purer air, water and milk.

In conclusion, I wish to say that mistakes occuring after a physician has used his best endeavors to make a diagnosis should not subject him to censure, but errors from gross carelessness in making physical examinations or neglect to employ valuable tests now within reach of every practitioner or even a failure to call in competent consultation when in doubt would be justly deserving of censure.

The cobwebs of superstition and ignorance. in regard to disease, that have lingered in the minds of the laity through all the ages are gradually being swept away, and an intelligent public are now looking to us to not only cure them of their ills, but to protect them from those transmissible and infectious diseases that prevail in every community.

In the crusade that is now being waged throughout the length and breadth of our land against those preventable diseases that are still reaping such a harvest in our midst the responsibility resting upon the general practitioner cannot be too strongly emphasized, for its success depends very largely upon his ability to early detect disease and in instituting the proper measure to prevent its spread.

This little paper is only intended to be suggestive, but I feel sure that if the profession at large could be awakened from its apathy and would put into practical use the knowledge that we already possess about the causation, detection and prevention of disease, we would often be saved those mistakes which so mar our work and discredit us before the public.

Renal and Uretal Calculi. With Report of a case.*

By Robert L. Gibbon, M. D., Charlotte, N. C.

The surgery of the Kidney and the Ureter has received considerable impetus in the past few years, largely as a result of more exact methods of diagnosis—Probably the most important of the factors at work in bringing about this desirable end is the improved technique in radigraphy, From the more or less strong suspicion of a calculus either in kidney or ureter, the X-Ray is now capable of demonstrating to us, its actual presence, to the great satisfaction of both patient and physician. Not all kidney or uretal stones are susceptible of being photographed, but the exceptions are rare, as most calculi are of mixed type, and it is only the pure uric acid stone that like biliary calculi are resistant to this means of diagnosis.

It is not the province of this paper to discuss the proper technique of radigraphy in nephrolithiasis, but it goes without saying the pictnre, to be of its iull value, should be taken by an expert. There are, however, certain points upon which the surgeon himself should be informed. In the first place, no picture can be considered good that does not show certain anatomical landmarks; for instance, the vertebræ, the eleventh and twelfth ribs, and the outline of the ileopsaos muscle should be clearly shown. Then again, we have not done our full duty if we decide a doubtful case on the evidence of one picture. At least two pictures ought to be taken, and it is also necessary to photograph both kidneys and ureters, which is the routine practice in many hospitals. This is necessary from the fact that it is being shown now that these stones are frequently bilateral, a condition formerly thought to be rare—Keummell of Hamburg has recently reported bilateral calculi in 16 per cent of 101 cases, while 27 per cent is given as the ratio by Israel—others have reported this condition in 30 per cent of cases. That one cannot depend upon pain as a certain criterion is evident from the fact, as pointed out by Eisendrath of Chicago, that in these bilateral cases, the pain is often unilateral or shifts from one side to the other in a most perplexing fashion. If then, we have secured two or more radiographs of both kidneys, the pictures of which clearly outline certain necessary anatomical landmarks, we are in a posltion to advise our patient as to the necessity of an operation with a degree of assurance impossible without this aid to a correct diagnosis. Our consideration of this part of the subject, however, is not complete without the mention of certain sources of error even in a most carefully taken picture—These somewhat rare conditions have to do with phleboliths or vein stones, which are the result of a thrombus which has become organized and undergone a certain amount of calcifycation. The other conditions are calcified mysenteric glands and scybola or fecal concretions—any of these may cast a shadow not unlike a calculus, and if they show in the picture along the course of the ureter. are apt to lead to an error of diagnosis. As a means of avoiding this, it is advised to pass a catheter, having a wire stillette, into the ureter. The X-Ray picture would show the stilette, thus indicating the course of the ureter, and any supposed calculus lying outside of the uretal course must be a phlebolith or calcified gland.

*Read before the Seventh District Medical Association of North Carolina, Charlotte, N. C., Dec, 6th 1910.

There are some objections to this, the chief of which is the danger of perforating a damaged ureter in passing the catheter.

Of decided advantage, but to a less extent, perhaps, than the X-Ray, in recognizing stone in Kidney or Ureter, is cystoscopy. By this means we can not only definitely settle upon the affected side where hematuria is a prominent symptom but with wax tipped uretal catheters it is, in the opinion of some, possible to detect, the presence of a stone in the ureter or even in pelvis of kidney, by the impression left upon the wax tip.

We cannot speak definitely of the cause of renal calculi, as several etiological elements are usually present. In certain parts of England, Hungary, Egypt and Turkey, nephrolithiasis is common, while in some other sections of the world it is rather conspicuous by its absence, so that, while infection of the urinary tract, gouty and rheumatic diathesis undoubtedly play a role in the development of the disease they do not account entirely for this malady, in the opinion of those who have made a study of this question. Muller has called attention to the frequency with which calculi have formed after severe spinal injuries, and I called to mind a local case in which a large vescicle calculus developed after a supposed fracture in the dorso-lumber region. The stone was crushed and fragments washed out, but I have been informed that it reformed within six or eight weeks after the operation.

Once a nucleus has formed, whatever it may be, a clump of bacteria, a tiny piece of necrotic tissue, or a foreign body, the urinary salts are readily deposited and the calculus increases in size by successive deposits.

While it is generally held that a urinary calculus can only form in the kidney or its pelvis, or in the bladder, the surgeon is frequently called upon to remove them from the ureter. It was formerly thought unusual for a stone to be lodged in the ureter, but our more accurate facilities for diagnosis have shown this to be comparatively frequent. Deaver quotes the statistics of Leonard, who, in 1906, in a paper before the Philadelphia Academy of Surgery, stated that the ratio of uretal to renal calculi as demonstrated by the X-Ray was as 66 to 33, and where the diagnosis was confirmed by operation or recovery of the stone, the ratic was 44 to 29. This would seem to prove that we are more apt to find the calculi in the ureter than in the kidney.

As regards the point at which a stone passing from pelvis of kidney is most likely to become fixed. Dr. Jno. B. Deaver, of Philadelphia, (Annals of Surg.) says:

"Renal calculi in their descent to the bladder are prone to be arrested at three points in their course. (1) Two inches from the pelvis of the kidney, as the ureter bends forward over the psoas muscle; (2) at the brim of the pelvis, where it dips down across the bifurcation of the common iliac artery; and (3) close to the vesical orifice of the ureter. The normal ureter is said to be one-seventh of an inch in diameter at the upper, one-fourth of an inch at the middle, and only one-tenth of an inch in diameter at the lower construction. In 44 cases of uretal calculus referred to by Morris, the stone was arrested at the upper constriction in 19 instances, at the pelvic brim in ten and at the vesical extremity of the ureter in 15. These figures correspond very closely to those given by Bovee, who collected 64 operations in which an impacted calculus was removed from the ureter by the extraperitoneal route. Among these, 22 were found near the upper constriction, 17 at the pelvic brim, and 18 close to the bladder; while the remaining stones were found at the other portions of ureter."

While discussing this part of our subject, it is interesting to remember some of the anatomical variations from the normal type, which recent study has shown to be not infrequent, at least, as regards the blood supply of the kidney and the shape of the renal pelvis. Dr. Eisendrath, of Chicago, in the Journal "Surg. Gynecology and Obstetrics," (April 1910) divides these variations into (1) Abnormalities of form developement and position of kidney, and (2) Abnormalities of the vessels, pelvis and ureters.

"Under the head of the former are included: (A) Solitary kidney, i. e., only one kidney is present; (b) horseshoe or fused kidney; (c) lack of development of one kidney, or hypoplasia; (d) Dystopia, or congenital displacement of the kidney. Such organs are either at the level of the sacro-illic joint or in the pelvis."

The so-called accessory renal arteries are of equal importance, and should always be remembered in kidney operations. The normal blood supply of the kidney is derived from one artery, which arises from each side of the aorta, to supply the corresponding kidney. Very little has been said about accessory arteries to the kidney, yet it has been shown by a Russian investigator that this anomalous blood supply occurs in as many as thirty per-cent of cases, he having found this condition in 43 out of 150 autopsies. There may in fact be two or three renal arteries, which are distributed at various points of the kidney, a condition which may prove most disastrous where the operator does not bear in mind the chance of having such an anomaly on

his hands. In act, some very serious and even fatal hemorrhages have been reported from an overlooked accessory artery.

Eisendrath in the article previously mentioned, says of this condition:

"These accessory vessels may arise from all parts of the abdominal aorta, or even from the iliac arteries.

In nephrotomy one has most to fear from accessory arteries passing fron the aorta to the upper or lower pole. To avoid these one should incise the poles as little as possible.

In nephrectomy it is always advisable to look for an accessory artery before ligating the pedicle.

After nephrectomy such an accessory artery passing to one of the poles may be torn off and serious hæmorrhage occur before the source is discovered.

The variations in type of the pelvis of the kidney is also of large practical value to the surgeon. The usual idea that prevails among phycians is that the kidney pelvis is a single pouch or sac, connecting with the kidney substance, through numerous tubular opeuings, the so-called calyses. This type, however, is said not to be present in more than 30 per cent of cases. In the other forms are to be found, the bifid or trifid pelvis certain arms of which drain the urine from corresponding areas in the kidney.

It is obvious that while it may be an easy matter to find and remove a calculus in the single or classical type if pelvis, by means of simply opening the pelvis itself (pyelotomy), in the bifid, or trifid form, it would be difficult to be positive that one had removed all the calculi without combining a nephrotomy with the pyelotomy.

In this connection, it also well to recall the relationship between the blood vessels and the pelvis; otherwise in opening the pelvis for removal of the calculns, we may wound the renal artery. The point of election for doing a pyelotomy is on the posterior surface, where one is in no danger of hemorrhage, except from a small retropelvic branch of the main vessel.

Experience has shown that extracting a stone thro' the posterior surface of the pelvis of the kidney is no more liable to be followed by a leakage of urine, than is a nephrotomy, and possesses several advantages over that operation. There are two rules, however, which must guide us in deciding upon and performing a pyelotomy. One of these is not to do a pyelotomy when you have a badly infected kidney, with a good deal of pus, and the other is in closing the incision in the pelvis to supplement the ordinary suturing by grafting a piece of the fatty capsule surrounding the kidney over the suture line. This, I believe, was first advocated by the Mayos, and is very effective in lessening the danger of a urinary fistula.

Time prohibits a more lengthy discussion of numerous other questions connected with the diagnosis and treatment of this interesting subject, but before closing I would like to report a recent case and show you some specimens.

Mrs. S. M., widow, American, 37 years old, seen May 30, 1910; has had three children. is rather delicate, and of neurotic temperment; passed blood in urine five years ago, which however only lasted a short time. Blood returned in Spring of 1910, and has persisted intermittently since. Has pain in left kidney region; suffers before blood passes and has some temperature. Loss of blood has been considerable and patient is much debilitated—on examination of urine, pus was found, and a culture made by Dr. Wm. Allen showed an infection with colon baccili. A cystoscopic examination was made by Dr. A. J. Crowell, who reported that the hemorrhage came from the left Ureter; left kidney was not palpable; patient was confined to bad, and at the time, it was impractical to get an X-Ray picture. Reaction for tuberculosis was negative. On April 10th, kidney was exposed by lumbar incision, and a large stone, which I show you here, was removed from the pelvis of the kidney. The incision in the pelvis being made on the posterior surface. In closing this incision in the pelvis, a fatty flap was grafted over the suture line. The wound healed promptly, hemorrhage was stopped and patient was up and about in two weeks. Some three or four weeks later, the Hematuria returned as badly as ever. The patient ran temperature' and her condition was as bad as before. An X-Ray picture was taken at this time by Dr. Witherbee, and a rather indefinite shadow shown in the left kidney, but nothing in ureter. A cystoscopic examination showed that the hemorrage came from the same side as before.

Condition of patient varied from better to worse, until September 19th, when the second operation was done. The abdomen was opened in the edge of the left rectus, both kidneys and ureters were carefully palpated, but nothing could be made out; the lumbar incision on the left side was then reopened and kidney was found small and contracted, and contained a number of small calcarious deposits about the size of a grain of wheat, or smaller. The kidney was removed; since then patient has had no further trouble, gained flesh and is in good condition.

Some Minor Gynaecological Matters Often Over Looked.*

By John Q. Myers, M. D., Charlotte N. C.

Mr. President and members of 7 th District Medical Society:

It is not infrequent that we in routine practice fail to appreciate certain obscure diseases which are very annoying to our patients although not necessarily dangerous to life. We find a number of cervical erosions classified as infections which are due to other causes. There are numerous infections of the genital glands which are not understood and which are not successfully treated, because the seat of the infection is not thoroughly exposed and treated. We are too often persuaded to believe what the patient says is true and fail to examine thoroughly and decide for ourselves. One of the most common mistakes made by physicians who treat gynæcological patients is to call every sensitive surface an inflammation. Careful discrimination will enable one to detect certain nerve alterations and see the difference between these and vaginitis or vulvitis, due to infection. These nerve changes are most often seen in treating cases where the family physician has been to busy to examine the patient but put her off with some sedative until some future time. She getting tired of not being treated as she should, seeks another physician, who has time and takes interest enough in her case to examine and locate the cause of all the annoyance, in fact most of these patients have had many prescriptions for local douches, sometimes ointments, or perhaps have had tampons and local applications, such as Nitrate of Silver etc., but without getting relief. The patient generally becomes neurasthenic or neurotic. She usually suffering from associated diseases which is usually due to impaired function rather than to organic mischief. She had a leucorrhoea due more or less to endocervicitis and believes the discharge causes a painful condition of the vagina. The parts are extremely sensitive, are often red and occasionally sore, micturition is generally painiul in those cases with red and swollen mucosa. The disease is not confined to any special class. We encounter it in virgins as often as in married women. The patient is often told by some physician. that she has "ulcerations" of some portion of the vaginal mucosa. A slight erosion of the cervic becomes the "point of resistance" of much medical treatment and in a recent case, a patient told me that she had three different ulcers of the cervic cured by treatment, only to have them return as before. It is a common practice of many physicians to rely strictly on local treatment for a cure of this disease because they fail to see the real cause back of the local manifestation. Obviously all applications of tampons, iodine, ichythol, boric acid and glycerin fail unless they benefit by entertaining the patient while time and improved general health bring about a cure. It is in this class that we see the evil results of suggestion. Many of these patients are acutely sensitive to wrong impressions and they are easily and often inadvertantly led to think that a slight misplacement of the uterus or an enlarged ovary possibly some slight intestional irritation demands surgical treatment. It is a fact well known that the uterus has been removed because the supposed irritating discharge could not be otherwise cured. Of course in certain cases a neuritis may not be relieved or the symptoms even palliated. I have seen several cases associated with uretheral caruncles and I am inclined to beiieve the pain of the caruncle is always due to an associated neuritis. We have all seen caruncles removed without relief to patients and unless they are associated with cystitis the failure is generally due to nerve changes.

Diagnosis: If methods of examinations were more exact we would find fewer cases of acute infectious diseases of the vulva vagina and relatively numerous cases of neuritis are hyperaesthesia. Naturally we resort to well known methods of treatment rather than make the effort to establish a correct diagnosis based on careful investigation. Such empirical factors will perhaps long retain a hold on our favorable consideration, although we always have at hand perfectly satisfactory though slower methods of reaching a diagnosis and consequently a proper indication of treatment. We fail to see any improvement in the teaching or treatment of the minor gynaecological cases since the days of Sims, Emmett and Thomas and hence surgery has become more prominent in this speciality than before and I am confident more than is desirable or necessary. It is impossible for everyone at first to distinguish between cases of hyperaesthesia and those of neuritis but it is comparatively easy for those accustomed to make such a distinction in other portions of the body. Without resot to electircal or other scientific measures the usual observation and care which is exercised by any physician who is on the alert for these cases, will enable him to detect the condition in hand. In any event a diagnosis between hyperæsthesia and neuritis is not absolutely necessary. The precise portion of the vulva or vagina which

*Read before the Seventh District Medical Society of North Carolina, Charlotte N. C., Dec. 6th, 1910.

may be the seat of the disease is altogether uncertain I find that the sensitive areas in by far the greater number of cases is about the vestibule and introitus. Recently a case of heuritis was seen with dark discolorations around the labia and glands of Barnholini due to repeated catheterixation or probably to with silver nitrate application I found this sensitive spot on or near the cervix in a case recently seen in a pregnant woman. This latter was however associated with marked neurotic symptoms which closely resembled inflammatory mischief. After careful examination and study of a number of these cases I am of the opinion and believe that the suggestions already made, indicate the line of treatment to be adopted. The diagnosis made, the treatment becomes a matter of simple attention to the general health of the patient. In irritable and sensitive vaginæ, we should avoid all irritating applications and should use either drying powders or a magnesium sulphate or emollients. It should be remembered that any fluid may cause burning and smarting if a neuritis be present. The indication is to protect the tender surfaces so far as lies in our power and not annoy our patients with unnecessary pain and discomfort by the use of strong antiseptics when we are positive no specific micro-organisms are present.

Arterio Sclerosis.

By J. C. Walton, M. D , Richmond, Va.

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Surgeon Neurologists to The Southern Railway. Member of the Richmond Academy of Medicine and Surgery of the Medical Society of Va., of the American Electro-Therapeutic Society of The Asso. of Southern Railway Surgeons, of The Tri State Medical Society of The American Medical Asso-Honorary fellow of the N. C. State Medical Society, The South Piedmont Medical Society, of The Danville Academy of Medicine and Surgery and of The Virginia State Dental Society.
Ex First Vice Pres. of The N. C. State Medical Society and Ex Member of The First N, C. State Board of Medical Examiners.

A plea for its prevention by early diagnosis and treatment with autocondensation, Light Baths, Hydrotherapy and regulation of the diet and habits.

Arteric-Sclerosis is the most frequent cause of death after fifty years of age, statistics proving that the majority of all deaths after fifty are caused by arteric-sclerosis.

As high blood pressure is the premonitory symptom, careful records of the arterial tension should be made in all cases in the young as well as the old, and as there is not infrequently a marked difference in the tensions between the two arms of 5 to 20mm, it is therefore important that the tension should be taken in both arms. High blood pressure in young persons indicates a diathesis and is of grave importance.

"Etiology; The exciting causes oft he" fibroid changes in the arteries is usually some form of toxemia, i e. Gout Alcoholism, Syphillis, Lithemia, Mal-assimilation. disorders of the liver and intestines, over indulgence in eating and drinking, the excessive use of tobacco, mental anxiety, worry and strain, the strenuous life, etc.

"The blood condition which produces the" high arterial pressure is the primary condition and it is not secondary to the deficient renal secretion as heretofore held.

'The fibroid diathesis, whether hereditary" or acquired, is nearly always associated with lithemia, defective oxidation, faulty metabolism or deficient elimination of waste products. Cardio vascular renal disease is markedly on the increase in this country, consequently it behooves the medical profession to take active means for its prevention and it is unimportant in taking these preventive measures whtch part of the anatomy of the patient has farthest advanced in the pathologic process. One patient may have arteric-sclerosis greatest in evidence Another cardiac weaking. Another renal disturbances,—but the disease in any case is the same.

"Increased blood pressure seems to be the" premonitory condition and the forerunner of all the subsequent changes in this vicious chain of cardio-vaacular renal disease.

The cause of increased blood pressure has been ascribed to tension caused by increased nervous activity, to hypertrophy of the left ventricle, which is probably compensatory to overcome the increased arterial pressure; to the circulation in the blood of toxins absorbed from the intestines which irritate the vessel walls and tne central nervous system; to toxins retained in the blood from insufficient execretion by the kidneys; and to a hypersecretion of the vaso constrictor element of the suprarenal, or to a relative increased secretion from these glands after fifty when the Thyroid furnishes a diminished secretion and therefore less vasodilator stuff.

"It is probably that all or several of these" elements which cause arterial irritation are at work at once, and these is probably no one cause for a slowly developing endarteritis, increased blood pressure and a future arteric-sclerosis. It is manifestly impossible to prevent the changes that have gone before zivis acute illness syphillis mercury and lead. It is possible to prevent the continuation of the causes that are continuously acting in the individual patient, such as alcohhol, tobacco, overeating, intestinal indigestion and the nervous tension caused

by an excessive amount of mental labor or by the strenuous life that the patient may be leading.—Editorial from the Journal of The American Medical Association.

It necessarily follows from the above that every case of arteric-sclerosis must be treated individually and on its own merits, there is no condition which requires more skill and care on the part of the conscientious physician to successfully treat. Study your cases carefully and systematically and endeavor to remove the causes as by so doing you put your patient in the best possible condition for recovery.

Regulation of the diet and habits is of vital importance.

Elderly people require much less food and frequent small meals are better than larger meals at longer intervals. Light meats should be restricted to one meal a day (or less) and coffee, tea, and alcoholic absolutely prohibited.

Purgatives are often indicated and in extreme cases venesection to relieve urgent symptoms and to gain time for the action of other remedies. The hope of a remedy for this distressing disease lies in the intelligent application of Physic-therapy and in affords me great pleasure to call your attention to the results now being obtained by these agents by some of the leading clinicians of our own and of other countrieiDrugs are a delusion and a snare and I have seldom seen any real or permanent benefit from them. (Except in specific cases).

The main indications in the treatment of arteric-sclerosis are to lower tension, increase elimination, and to correct faulty metabolism.

In the electric light bath, the elimination of both solids and water are largely in excess of those from the heat or steam elimination bath, the depression is much less, with calmative action greatly relieving the nervous depression and generally markedly lowering the tension. I always follow the light bath with warm douches 100 F. degrees, and in one case of arteric-sclerosis that had a previous apoplectic attack and was threatened with a second attack, the tension from one electric light bath dropped from 220 to 180 mm—a fall of 40 mm.

Dr. Simon Baruch, Prof. Hydrotherapy in Columbia University, N. Y., in many clinical demonstrations at "The Vanderbilt Clinic," in which careful tracings were made in all cases to determine the effect of water applications upon tension, before and after, noted marked results from these hydriatric applications on the neuro vascular cutaneous systems. The cases of hpertension were reduced and conversely those of weak and lowered tensions were raised—cold applications raising and warm applications reducing tension; thus conclusively demonstrating that hydrotherapy is a simple and reliable vaso-motor regulator and is therefore a most valuable agent in the treatment of hypertension, arteric-sclerosis. and the major portion of all diseases. Baruch, by his intelligent and insistent advocacy of hydrotherapy has extended its use in this country and abroad. It is indeed gratifying to note the recognition, tho' tardy, on the part of the medical profession of the earnest labors of this great American and peerless southern physician." Less than five years ago, Arsonval published his epochal paper on the treatment of arteric-sclerosis with high frequency currents. Since then his conclusions have been verified by many independent operators in this country and abroad. My experience with this method of treatment has extended over three years and the results have been good, good beyond my msst sanguine expectations. Even in the advanced cases the relief of the dirtressing symptoms, and the subsequent feeling of well being and comfort, have been very striking and encouraging. It has therefore, seemed to me as the most rational remedy, and the one remedy that comes nearer than all others, in overcoming the pathological conditions met with in this heretefore intractable disease. This current, profoundly affecting as it does, the chemical processes of the body, (increasing tissue combustion and oxidation, facilitating the elimination of waste products, nitrogenous debris,—which would otherwise form uric acid,) is converted into urea and the peripheral circulatton is increased through vaso motor stimulation and regulation. This current can uniformly be depended upon to reduce tension, increase elimination, correct faulty metabolism, relieve nervousness and insomnia, and to establish a feeling of well being and domfort. The results are generally prompt, the patients expressing themselves as being benefited after the first treatment. In those cases associated with chronic nephritis, there is a marked improvement as shown by the increased specific gravity of the urine, the diminuton of albumen and casts, which under prolonged treatment gradually approaches the normal. In those cases complicated with heart disease, it is the remedy par excellence and is superior to the Nauheim bath. In the liver and intestinal cases it meets the indications.

In using auto-condensation, the patient, without removing the clothing, lies on an insulted pad or cushion and receives a current ranging from 300 to 800 mm, with the most pleasant sensations, frequently falling asleep while taking the treatment. In

seances of from 15 to 20 minutes the tension is reduced from 5 to 20 mm. High frequency cas be obtained either from a coil or a large static machine of 16 or 20 plates, (old style) or a 12 plate Baker high speed machine. My first experience with a 20 plate V. H. and T. B. machine, was that the maximum current was 300 mm. Finding from experience, that old and obstinate cases, frequently required much larger currents, sometimes as much as from 400 to 700, I have latterly been using with very satisfactory results, a new style Baker static machine of 12 fibre plates, which is easily capable of generatig a current output from 300 to over 1000 mm, and which can be relied upon to meet any conditions that may arise requiring the use of a static machine or coil. Unfortunately the literature on the treatment of arteric-sclerosis, by high frequency, is very scarce and fragmentary. I, therefore, beg to acquaint you with the results obtained by prominent specialistr, who are especially equipped for and have had considerable experience in this line of work, and who were kind enough to reply to the following questions.

(1) What methods do you employ for lowering blood pressure?

(2) In using auto-coudensation how many millimetres are usually administered to the dose,—the duration of the treatment—the average fall of blood pressure, aud the general results aftet each treatment?

(3) Upon what does the prognosis depend, as to cure or relief?

(4) What are your results in the cases of arteric-sclerosis accompanied with chronic interstitial nephritis, especially as to the effects on the kidneys in lessening the amount of albumen and casts, and in increasing eliminations shown by the higher specific gravity of the urine?

(5) Results in the treatment of angina pectoris or arteric-sclerosis of the coronary arteries? In arterio-sclerosis of the cerebral arteries?

(6) How often is it necessary to administer the treatment, and how frequent after the tension has once been reduced to the normal?

(7) Your experience as to the permanency of results?

(8) What in in your opinion is the frequent differance of from 5 to 20mm between the tension in the two arms due? Has it any connection or special significance as to arteric-sclerosis? or is it as claimed by some, pathognomic of arteric-sclerosis.

(9) Do you regard a persistent high blood pressure without the presence of other symptoms as characteristic of or as a premonitory symptom of arterio-sclerosis?

Lack of time will only allow a brief synopsis of the replies received, which is much to be regretted,—especially so, as they represent in the aggregate, an enormous amount of valuable clinaical data from men who are espeeially qualified for this work.

Prof. Baruch, after speaking of the serious nature of arterio-sclerosis after organic alterations in the coats of the arteries have occurred, says:—"Hydrotheraphy is valuable in relieving the manifestations and limiting the progress of arterio-sclerosis. You are aware that I insist upon exact adaption of water treatment to the conditions reactive capacity of each case. It is to be regretted that physicians do not familiarize themselves with the technic and action of various procedures. You should invite your colleagues to your rooms and let them either take some treatment or see them administered. One or two visits would put them in possession of knowledge that would surely inure to their patients and their advantage. Here, a warning against sending patients with arterio-sclerosis to Turkish Bath Establishments, may be in order. Deaths have been reported as the result of entrusting these people to the ignorant bath attendants. As I have long insisted, the cabinet hot air, or better still, electric light bath is far superior, because the patient may breathe cool, and therefore, unexpanded air, and may be refreshed and thus guarded against untoward accidents.

These warnings by Dr. Baruch are timely, and as there have been recently reported in medical literature, several cases of tubercular infecton from the use of the turkish bath, it is high time for physicians to relegate this abomination of bygone days to the discard heap.

Synopsis of replies from Dr. Wm. Benham Snow, New York City.

Ex-President American Electro Ther. Association, Arthur of the leading text books on high potental currents, radiant light and heat' and Editor of the Journal of Advanced Ther. etc.

Prof. Geo. E. Pfahler, of the Medico Chi Phila.

Dr. Frederick De Kraft, President of the American Electro-Ther. Asso., etc.

Dr. E. C. Titus, Ex-President A. E. T. Asso., New York City.

Dr. F. H. Morse, Boston Mass., Ex-President Amer. Electro Asso.

Dr. H. F. Pitcher, Haverhill, Mass. Ex-President Amn. Electro Ther. Assn., etc.

Dr. Wm. James Morton, Ex-President A. E. Assn., Ex-Prof. diseases of the mind and of Electro Ther., N. Y. Post-Graduate

Met School and Hospital. The discoverer of the Morton wave, and of the Static induced and of the High Frequency currents. The Father of Static Electricity, etc.

Dr. F. A. Davis, Boston, Mass. Drs. Jno. P. and Thomas F. McParlan, N. Y. City– Dr. J. W. Torbett, Prop. of a large Sanitorium at Marlin, Texas.—Dr. J. W. Travell, N. Y. City, Sec'y. of the A. E. Assn.— Dr. Z. B. Babbitt, Washington D. C.— Dr. W. L. Clark, Phila.,— Dr. Fred A. Jewett, Brooklyn, N. Y.—Dr. Sinclair Tousey, New York City, Arthur of Medical Electricity.–Dr. F. C. Tice, Roanoke, Va.–Dr. Byron Sprague, Price, New York City.– Dr. S. H. Monell, New York City.–(Author of a manual on Sratic Elec. X.Ray, etc. etc.

The replies to the most important questions were so uniform that one answer will do for all.

Replies to question 1 and 2. What methods do you employ for lowering blood pressure, etc., autocendasion with regulation of the diet and habits? 300 to 700 mm, 20 minute seances, average fall of pressure 5 to 20 mm, results after treatment good.

Replies to question 3. Upon what does the prognosis depend as to cure or relief, upon the stage of the disease and the fidelity of the patient in living up to the instructions? In recent cases very good, In the advanced cases great relief from the distressing symptoms.

Replies to question 4. Results in cases of arterio-sclerosis, accompanied with chronic interstital nephritis in lessening the albumen and casts and in increasing the elimination? Very Good.

Replies to question 5. Results in angina pectorls or arterio-sclerosis of the coronary arteries? Good.

Replies to question 6. How often is it necessary to administer the treatment and how frequently after the tension has been reducefl to the normal. First daily and then weekly, or often enough to keep the tension and the kidneys normal. The patient returning for monthly examinations.

Replies to question 7. Your experience as to the permancy of the results? Good if the patients carry out the instructions regarding diet and habits.

Replies to question 8. What in your opinion is the frequent difference of from 5 to 20mm between the tension in the two arms due? Has it any significance as regards arterio-sclerosis. This is the only question wherein the replies differ, many of the observers never take the tension in but one arm and those noting the difference attributing it to various causes.

Replies to question 9. Do you regard a persistant high blood pressure without the presence of other symptoms as characteristic of or as a promobitory symptom of arterio-sclerosis? (After excluding nervousness.) Yes.

In closing this study a few words regarding normal blood pressure.

In the July 9th issue of the Journal A. M. A., there is a very valuable article by Dr. H. P. Woley, of Chicago and the Doctor has given me permission to use the same. "The normal variation of the systolic blood pressure." "A study of one thousand cases, from the stand point of the insurance examiner. The cases represented healthy individuals from 15 to 65. The instrument were corrected or standardize by subjecting them to the same pressure and the reading then taken. These observations were taken by five physicians who verified each others work. The 5 inch arm cuff was used with the subject in the sitting position and the systolic readings taken at the point at which the pulse dlsappeared and reappeared with the finger on the radial artery. The mercury column and the Rogers sphyg momanometer (Tycos) were used.

"From comparison and study of many" cases during the last five years, I believe that at any age a constant blood pressure of 160 mm or over is pathoiogic, and therefore should be excluded from forming any part in the results or conclusions reached in this paper. Many of these cases have been studied, where it was possible, and albumen and casts have been found in the urine sooner or later, though sometimes in small amounts. It explained the condition however. This has been of considerable assistance, for many risk might have been accepted as first class, were it not for the abnormal elevation in blood pressure which led to further study. It is found to be practically correct in cunsidering vast numbers of supposed healthy individuals, that about 85% prove to be healthy and 15 per cent are questionabie. Following this principle I shall take the general average of the group of 15 per cent as the highest blood pressure, the general average of the group of 15 per cent of the lowest blood pressure and designate them as the average high and the average low blood pressure. Wifh this explanation, the results reached after a study of 1000 cases blood pressures are as follows:—

The average blood pressure of all ages was 127.5 mm.

The average blood pressure for females at all ages was 120mm.

By taking them in groups, first, from 15 to 30, the average high blood pressure was 122 and the average low, 103mm. Second.

Those from 30 to 40 years gave an average blood pressure of 127—an average high of 143 and an average low of 107mm. Third. From 40 to 50 years gave an average of 130 mm. Average high 146 and average low 113 mm. Fourth. Those from 50 to 60 years gave an average blood pressure of 132mm. An average high of 149 and an average low of 115 mm.

There is a gradual rise in the blood pressure as the years advanced. There is also also a corresponding rise in the high and low averages. It can readily be seen that between 50 and 60 years a man giving 149 mm could be accepted, while a man under 30 years would require further study and investigation.

In regard to women it will be noticed that the average blood pressure at all ages 120mm, about 8mm below the average for males of all ages. There is practically the same ratic of increase in blood pressure in women as in men at the same age. In woman it averages 8mm below men. It is to be regretted that the number of cases above the age of 60 was to small to obtain a fair average. There appears to be quite an advance in the blood pressure above the age of 55. Therefore, I have selected the age from 55 to 65 which gives an average blood pressure of 132 mm, and average high of 153 and an average low of 120mm.

In regard to the pulse rapid or slow. The average blood pressure in all cases with a pulse under 65 was 123 mm, which the average blood pressure in all cases with a pulse over 85 was 130 mm. It was noticed that there was twice as many healthy individuals with a pulse over 85 as there were with a pulse under 65. The object of these studies was to obtain as far as possible the normal blood pressure in healthy individuals for the benefit of the Physicians and the insurance examiners.

Summary:—Causes. Improper diet, intestinal indigestion, artotaximias, the retention of noxious products from deficient elimination, ets. Alcohol, syphilis, tobacco, lithemia, gout, strenuosity, etc., etc.

Diagnosis. Prof. Lewellnyn Barker, says that arterio sclerosis should be diagnosised 20 years before it occurs and he also speaks of the great value of physic-therapy in the treatment of arterio- sclerosis. As increased blood pressure is the forerunner and is one of the earliest symptoms of arterio-sclerosis, it is important for the physician to take the tension in both arms in the young as well as the old. A good apparatus is a sine qua non and I have found the Tycos very satisfactory, as it is not only reliable, but is easily adjusted and is not liable to accidents.

Treatment. After removal of the causes and regulations of the daily life and habits of your patient, impress upon him the importance of leading the simple life and to avoid excesses of all kinds both mental and physical.

In the syphilitic cases, the use of Ehrlichs 606 from the recent medical reports is to say the least very promising.

A judicious blending of hydrotherapy (The electric light bath) and auto condensation, seems to be the most reliable and satisfactory method of treating arterio-sclerosis, and they should be given a fair trial in all the cases, as there are practically no contra indications to the intelligent use of these agents, and they can always be relied upon to uniformly reduce tension, increase elimination, and to correct faulty metabolism. A word as to the permanancy of the results obtained by the above line of treatment, as this method of treatment has only been in vogue for about five years, it is yet too early to speak positively on this point, still from the very decided relief from the symptoms and the general improvement in the conditions and the absence of any return of symptoms from one to several years, there can be no question to the open minded and progressive physician that with further study and observations along these lines by the great numbers of intelligent coworkers in this new field of therapeutics with the resulant improvement in technique and in apparatus; that physio-therapy opens the door of hope to this already large and increasing class of invalids, and that the early recognition and prompt treatment of arterio-sclerosis may eventually place it in the list of preventable diseases.

Finally, Brethern, let us not be like the persou mentioned in Holy Writ who asked for bread and received a stone, but rather be honest and fair with our patients and ourselves, investigating thoroughly this new and promising field of therapeutic endeavor.

The munificient benefactions of a Rockefellow has enabled the genius of a Flexner, to discover a remedy for the most horrible, as well as the most fatal diseases—Cerebro Spinal Meningitis.

Ehrlichs 606 seems likely to eradicate syplilis and it is a repitition to speak of the results in diphtheria, typhoid fever, yellow fever, malaria, small-pox etc., etc. The isthmus of Panama, formerly known as the ditch of death, is now considered almost a health resort, its reclamation will rank as one of the marvels of an age that produced wireless telegraphy. the telephone, the phonograph and the aeroplane.

Unfortunately there are still remaining like gaunt spectres ever before us, arterio-sclerosis, tuberculosis and cancer. Shall the great fight be continued, and each one

of us in his own humble way contribute his mite towards assisting these great scientists, who are striving with the utmost endeavor of mind and heart towards the solutions of these great problems which mean so much for the weal or woe of mankind? Or rather shall we obstructionists and by our indifference, or lack of energy, or from the want of information, retard these great researches in the interests of suffering humanity?

In regard to the suggestions of Prof. Baruch as to the advisability of physicians being invited to witness practical demonstrations in order to convince them of the great value to themselves and to their patients resulting from the applications of these new therapeutic procedures. The suggestion is a capital one and is cordially endorsed by the writer who keeps a standing invitation to the profession to make his offices their headquarters where every opportunity will gladly be extended them to inspect the work and to see for themselves the actual results being obtained from these applications.

"The stars keep their secrets, the earth hides her own,
And bold must the man be that braves the Unknown!
Not a truth has to art or to scienc been given.
But brows have ached for it and souls toiled and striven!
And many have striven, and many have toiled
And many died, slain by the truth they assailed."

But when man hath tamed nature, asserted his place
And dominion, behold: he is brought face to face
With a new foe—himself:
Nor may man on his shield
Ever rest, for his foe is afield,
Danger ever at hand, till the armed Archangel
Sound o'er him the trump of earths final evangel.

"Anesthesia and Haemostasis in Tousil Operations."*

By John W. McConnell, M. D., Davidson, N. C.

Anyone who does much tonsil work will sooner or later be confronted by difficulty in producing proper anesthesia for the operation and also by post operative hemorrhage, so I am going to deal with these two phases of tonsil work.

The time has passed when the removal of tonsils is considered minor work. As one prominent surgeon has expressed it, the tonsil causes more pain and deaths than the appendix, and operations upon it should be undertaken with all the precautions of major work. The difficulty in tonsil work is marked; for you are working in a small civity and the movements are always restricted.

In children a general anesthetic should always be used and ether is the one of choice. No longer is one justified in holding a child and using a tonsillotome to clip off the free portion of the tonsil, for such operations are painful and seldom productive of complete relief from symptoms. Ether should be administered by an experienced person, and always in the prone position. The Rose position with the patient's head hanging over the head of the table is to be preferred, for it gives a good view of the throat and allows free drainage. Children with enlarged tonsils and adenoids are not good subjects for narcosis either by ether or chloroform, for since they have an obstruction in the upper respiratory tract the breathing is always shallow and it takes a long time and a considerable amount of ether to get them asleep. To administer ether in an upright position is both dangerous and unnecessary though some operators use it. The writer has a vivid recollection of a case operated on as a clinic before the Laryngological and Otological Society at Pittsburgh, in which ether was used in the upright position, and although administered by an expert from the Pittsburgh Hospital, the patient was strangled by the blood running down the trachea and an immediate tracheotomy had to be done by one of the surgeons standing by. The child died subsequently of aspiration pneumonia.

A convenient way of administering the ether is by Brophy's apparatus, consisting of a rubber tube introduced through the nostrils, then the operator can inspect the throat and operate while the ether is being continued.

Chloroform seems to be contraindicated in all adenoid and tonsil cases, for though it is more rapid than ether and there is less mucus and saliva to hinder the operator, the danger is too great, and an operator is not justified in taking the risk. Children of a lymphatic tendency seem to always bear chloroform badly.

For local anesthesia the most commonly used is a solution of adrenalin and cocaine injected into the tonsillar pillars. The usu-

*Read before the Seventh District Medical Society of North Carolina, at Charlotte, N. C., Dec, 6th 1910.

al method is to swab the throat with a 10 per cent. solution of cocaine and then inject a few drops of a 4 per cent. or of 1 per cent. sol. into the pillars and into the tonsil itself.

With the patient in an upright position and in a good light the operation can be done rapidly and almost bloodlessly, and it seemed to the writer at first an ideal way and was used in all possible cases and the tonsils were dissected out with a Worthington knife. But after having had several cases of almost extreme collapse from the effects of the cocaine and also secondary hemorrhage the writer has adopted other methods. There is no question that the cocaine and adrenalin method makes a beautiful anesthetic at times; but some patients exhibit a marked idiosyncrasy to cocaine and even small amounts produce severe shock and it always alarms the operator. Then the blanching of the tissues makes it sometimes difficut to distinguish one tissue fromthe other and some of thetonsil may be left or too much tissue removed. The cocaine seems to predispose to secondary hemorrhage, which is the most troublesome hemorrhage to deal with. If the patient is going to bleed it is far better to let the hemorrhage be primary when the vessels can be clamped and tied. After having several cases of alarming secondary hemorrhage following cocaine and adrenalin, I have discontinued its use and am now using bimuriate of quinine and urea in about 2 per cent. to 4 per cent solution. This can be injected without any danger in large amounts and has worked perfectly in all cases on which I have tried it, and while I have been using it only about four months it has given a good result in each case. I mop the throat with cocaine—a 10 per cent. solution to prevent gaggling—then inject the quinine into the pillars and into the tonsil substance also, and begin work in about three to five minutes. Under its use the hemorrhage is profuse for a time, but there is no secondary hemorrhage and the patients are not faint and nauseated as so frequently occurs with cocaine. I have used alypin in a few cases with good results but it seemed to me the anesthesia was not complete enough, so if the quinine continues to give good results, I will use it in all adult cases.

Hemorrhage is the bugbear of all tonsil operators, and justly so, for when it occurs it is one of the most stubborn of all hemorrhages to control, and bleeding from the throat always alarms the patient and the mucus and saliva mixed with the blood makes the amount of blood lost seem unusually large. When stubborn bleeding follows a tonsillectomy the surgeon is prone to say that it was a case of hemophilia, when in fact the oozing is from some severed artery or vein. The arrangement of the blood vessels to the tonsils is not always constant, but as a rule there are three branches supplying the tonsil from the tonsillar artery, and also branches from the ascending pharyngeal and ascending and descending palatine.

The most stubborn bleeder of these branches is the one above in the supratonsillar fossa, but as a rule it is not a spurter, and can be controlled by pressure. If the main branch of the tonsillar artery is severed by pulliing the tonsil too far out of the fossa before severing the base, the bleeding will be profuse and the vessel should be tied. The free bleeding that occurs immediately after the tonsil is severed from its base in any tonsillotomy is tonsillectomy is from a large vein running along the floor of the fossa and is usually of short duration.

Hemophilia is sometimes the cause of post operative hemorrhage, as the following case will illustrate. The patient was a teacher, female, age 22, enlarged tonsils, cryptic and lobular. Chronic suppurative otitis media on the one side and impaired hearing on the other from the same cause. She wanted her tonsils removed, but feared the bleeding, as she had to remain in the hospital at Raleigh for three weeks following a simple operation for a nasal spur, as the hemorrhage had been severe and dangerous. It had been necessary to pack the posterior nares for several weeks and prolonged pressure had produced a retraction and partial atrophy of the soft palate. She was informed of the danger of hemorrhage and I put her on Elix. Cal, Chlor. large doses for a few days before the operation. I operated under cocaine and a small amount of adrenalin, removing the tonsils by knife and punch forceps. The operation was bloodless, but hemorrhage commenced in two hours and lasted for eight hours, being finally controlled by morphia, iced applications, clamp forceps and Monsell's solution. The lowered blood pressure due to the loss of blood seemed to be the chief factor in controlling it, for nothing else I did was productive of any good until she was exhausted. No bleeding vessel could be seen, and though I clamped the pillars, the hemorrhage was not controlled. Only under extreme circumstances would I assume such a risk again, though I am glad to say that in this case the results have been most happy and the middle ear trouble has been relieved and the general health of the patient has steadily improved in the two years following the operation.

Still, as has been said, bleeding due to

hemophilia is rare and the principal cause of hemorrhage is from the severed vessels. These should be clamped and tied as in the other parts of the body, and it has long been a reproach to throat surgeons that they have used pressure and styptics in vain endeavor to control bleeding where a general surgeon would clamp and tie off the vessel. However it is by no means easy to clamp and tie a bleeding tonsillar vessel, and especially if the patient has a small mouth and a full set of teeth. The most useful forcep for applying a ligature to a tonsil vessel is Rosenheim's modification of Mayo's forcep, as described by Rosenheim in a recent number of the Journal of the A. M. A. and the Laryngoscope. The forcep carries the ligature on its point and the vessel is clamped in the ordinary way then the forcep is pulled inward to put the tissue of the stretch and the ligature is drawn taut. This will control the most troublesome hemorrhage and is much easier and more surgical than suturing the pillars. Suturing the pillars will control the bleeding as a rule, but it requires a long finger and a special Douglas ligature carrier and is painful. Mitchel's metal clamps are convenient and with them the pillars can be clamped quickly, but there is always danger of one of the clamps becoming dislodged and being aspirated. The true surgical method is to clamp the arteries and tie off, but of course if one is unable to do this a resort to astringents and styptics is natural, and when one has a bleeding case in a private house he is willing to try anything. My experience is that adrenalin is a failure in these cases, and while it is a valuable adjunct to the surgery of the eye its use in surgery of the tonsils is limited. By packidg several small pledgets of gauze into the fossa and then removing them one by one from below upwards it is more easy to distinguish the point from which the hemorrhage occurs, than if the blood is simply wiped away. When the point is located it may be clamped by an ordinary pair of hysterectomy clamps and sometimes this will be sufficient. Peroxide, glycerite of tannin, and turpentine and alcohol are good hemostatics, and digital pressure should be tried. A hypodermic of morphia will help a great deal by quieting the patient and making it easier to handle him. Time is generally gained however, by taking the patient back to the table and with a good light searchiug for the bleeding points and clamping and tying.

We would summarize the two headings of our discussion as follows. While in children a tonsillectomy is not necessarily a hospital operation, in adults it is always one. For general anesthesia, ether is the choice and is to be administered in the prone position, preferably the Rose position. For local anæsthesia, a swab of cocaine 10 per cent., and pure carbolic acid is probably the best as it produces surface anesthesia and prevents gagging as well as making the injection of the quinine painless. If cocaine is used—a weak solution is to be preferred—not over 1 per cent., and only a minim or two at a point. Quinine muriate and urea seems to the writer to be better, in that it has given good results and is far safer.

The best means of preventing hemorrhage is to sponge well and clamp and tie all bleeding points at the end of the operation. Adrenalin is contraindicated as an injection, since it blanches the tissues and predisposes to secondary hemorrhage.

The Tri-State Medical Association of Mississippi, Arkansas and Tennesse, held its twenty-seventh annual meeting in Memphis, Tenn., on November 15th, 16th and 17th, with the president, Dr. J. S. Rawlins of Dancyville, Tenn., in the chair. About four hundred physicians were in attendance and an excellent programme was presented. The following officers were elected to serve for the ensuing year: President, Dr. J. W. Barkdale, of Winona, Miss.; vice-president for Mississippi, Dr. John Darrington, of Yazoo City; vice-president for Arkansas, Dr. Robert P. Nall, of Armorel; vice- president for Tennessee, Dr. Arthur G. Hudson, of Rein; secretary, Dr. Eugene Rosamond, of Memphis, relected; treasurer, Dr. J. A. Vaughan, of Memphis, relected. Memphis was selected as the place for the meeting in 1911.

Method of Prepariug 606.

Kromeyer recommends the following method of preparing Ehrlich's arsenobenzol, 606: A stated amount of the drug, 3.0, for example, is thoroughly rubbed up in a mortar with a small quantity of liquid paraffine, and more and more is added up to 30.0; then each cubic centimeter will contain 0.1 of 606. Put up in glassed stoppered bottle and keep in a dark place. With this emulsion the intramuscular injections are made precisely as is done with that of salicylate of mercury, slowly, to prevent tissue damage, using also a somewhat stouter needle. In the course of 100 injections made, neither severe pain nor swelling was observed, and the clinical effect was prompt. Dr. Treupel and others believe that Kromeyer's way will very probably be followed by most practitioners.—Berliner klinische Wochenschrift.

Traumatic Tuberculosis, Traumatic Pneumonia and Traumatic Pleurisy.

Weber discusses first, traumatic tuberculosss from direct infection and then alleged traumatic tuberculosis due to injuries by which tubercle bacilli could not have been introduced into the body from without. Cases of the latter kind are divided clinically into three groups: (a) cases in which a decided traumatism of some kind is followed by signs of either acute disseminated miliary tuberculosis or acute metastatic localized tuberculosis; (b) cases in which signs of pulmonary tuberculosis follow or are at first noticed after a supposed injury to the lungs; (c) cases in which an injury to bones, joints, or parts of the body other than the lungs is followed by signs of tuberculosis more or less localized to the region of trauma. These three headings are expanded by the author. He then asks what part does the trauma play in particular cases of alleged traumatic tuberculosis? We have to admit that in all cases, excepting those in which inoculation with bacilli occurs from without, tuberculosis of some kind, whether latent or not, must have been present before the trauma was received. In any given case, therefore, we have to ask, could tuberculosis be recognized before the injury, is there any reason to believe that the trauma played any part in the outbreak of the tuberculosis, and is the whole of the illness practically the result directly or indirectly of the trauma? In order to answer the last two questions a decision must be arrived at with regard to the other two. Then the nature, position, extent, and violence of the trauma have to be investigated; the lapse of time between the injury and the onset of the tuberculous symptoms has to be ascertained and one has to consider whether the existing tuberculous lesions and symptoms are of a kind likely to have followed the trauma in question. With reference to traumatic pneumonia and pleurisy experiments are referred to as affecting animals. and the author passes on to consider what he calls contusional traumatic pneumonia and pleurisy, referring to a series of cases in which these lesions followed such accidents as being run over, etc. In regard to the former malady he says that there is less expectoration than in the non-traumatic form of the disease. Early hemoptysis is not universally present. It is due to mechanical injury of the lung. External bruising is, of course, present, but it is by no means a marked feature. A crises may occur as in ordinary pneumonia. Chronic bronchitis, alcoholism, and degenerative conditions of the blood vessels doubtless act as predisposing causes of contusional pneumonia, and favor the severity of the attack. The shortest period between the reception of the trauma and the development of the pneumonia is, according to Litten, ten hours. With regard to contusional pleurisy the author says that a very important point is that signs of this disease after trauma may be due to tuberculosis. Pleurisy, with or without fluid effusion, has certainly sometimes been associated with signs of pulmonary tuberculosis following thoracic trauma. By such an injury latent foci of tuberculosis, such as a bronchial gland, etc., may be squeezed or torn in such a way that tubercle bacilli are mechanically disseminated over the neighboring lung tissue, the vitality of which is so lowered as to render it a favorable nidus for the subsequent germ development. The lesion commonly resulting is more apt to be pneumonic, but may be pleuritic. Berliner klinische Wochenschrift.

Scrofula : Tuberculosis.

Virchow taught that scrofula and tuberculosis were, histologically, very different processes, but Koch was able to demonstrate their etiologic relationship, having located the bacillus tuberculosis in caseated lymph glands, etc. But, that the well known scrofulous alterations in skin and mucous membranes were tuberculosis in nature, was determinable only by the modern methods of research, particularly by means of Pirquet's cutaneous reaction. Tuberculotoxic reactions are very similar to the scrofulides, Moro and Doganoff have therefore, enunciated the hypothesis that, in the secretions from mucous membranes, extremely minute quantities of tuberculatoxin which continue the condition of chronic irritation. Hence, the supposition is easily arrived at, that the hypersensitivity of derm and mucosa present in scrofula, whereon, as a basis, the pathognomonic symptom of the disease, the scrofulide, develops, is nothing else than a condition of intoxication due to encapsulated tuberculotoxin due,of course, to the tubercle bacillus. In pure scrofula the tuberculous focus is latent, and those scrofulides only which are to be considered as tuberculotoxic alterations of the integument demonstrate the existence of tuberculosis. Scrofula is not only curable, but offers also relative protection against later tuberculous infection.—Th. Escherish, Deut. med. Woch.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

THE MEDICAL PROFESSION MUST CHANGE ITS TACTICS.

He who is not a frequent visitor to radical clubs, does not come in contact with newspaper men, with New Thoughters, and does not read regularly the numerous naturopathic, health culture and physical culture journals, and other allegedly advanced publications, can have no idea how the medical profession is ridiculed, how it is maligned, how it is lied about, how it is misrepresented, how it is "knocked" on every possible occasion.

We are pictured as ignoramuses, grafters, butchers, anxious to operate whether there is a necessity or not, drug dopers, etc., etc. We are denounced as a trust, monopoly and any attempt of ours to organize, to pass laws protecting the public health is characterized as an attempt at class legislation, a desire for special privileges, inspired by our fear of the competition, by our fear of the superior skill of our irregular rivals.

And the average physician who has not given the matter any thought, has no idea what effect these unceasing slanders and persistent lies have on the public mind, how suspiciously a large part of the public is beginning to look at the medical profession, how we are losing the confidence of the people, how the ground is slipping from under our feet.

As an illustration we need only mention the reception that has been accorded to the suggestion of a Federal Department of Health. The motives that actuate us and the objects of such department were at once misrepresented, the people were made to believe that their freedom to choose a medical adviser was threatened, the forces of reaction and obscurantism, masquerading in some instances under the guise of liberalism, were quickly marshalled and in a short time a society was organized, which now claims a membership of one hundred and fifty thousand.

We, physicians, are to blame. When the irregular, fantastic and pernicious cults began to make their appearance, we paid no attention to them. We thought they amounted to nothing, and would soon dry up and shrivel away of themselves. When the malicious attacks began to appear in the various quack publications we remained silent. We considered it *infra dignitatum* to pay attention to them, and we thought that the public would have no difficulty in seeing through their falsity and meretriciousness.

Our long and patient inactivity has been due to the false idea that the truth will always triumph and error is bound to die. Yes eventually. But if error is allowed to grow and spread unhampered, while those who see the truth will not take the trouble to proclaim it and expose the error, then it can take centuries before the correctness of the truth and the falsity of the error will be perceived.

In this as in every other line of human activity prevention is immeasurably superior to cure, and the right way to fight is not to permit it to get a firm foothold. Error and superstition are hard things to uproot after they have attained the dignity of a universal belief.

It is time that the medical profession change its tactics and assume a wideawake, militant attitude. It is time that we actively attack error wherever it shows its head. By reading papers before lay audiences, by participating in discussions, by writing to the newspapers, by refuting the false arguments of false prophets wherever they appear, we can do much toward destroying the influence of the quacks and the irregular cults. In short, we must throw off our exclusiveness, we must go out to the public and take it into our confidence.

The truth is with us—that we know; only we must not hide it under a bushel, and expect that its light will, without any effort on our part, penetrate into the darkest recesses of ignorance and quackery.

THE SPECIALIST AND GENERAL PRACTIONER

Dr. C. F. Wahrer, in a recent number of the Journal of the American Medical Association speaks of some of the Foibles in Specialism. It is a subject worth considering and we may also take a glympse at the general relationship existing between the specialist and the general practioner.

As Dr. Wahrer rightly say, specialism is a good thing. It is a necessity in this day when it is an absolute impossibilty for a man to be prepared on all branches or even a few, in order to give the patient the best in the way of diagnosis, advice and treatment in the special diseases.

The general practioner is still more a necessity. In the country he is alone. He gives his all for the welfare of the community; works night and day and accomplishes great good. In the city he treats the ordinary run of cases; upon him devolves the responsibility of diagnosing the various acute surgical conditions; to him should

come, first, the patients with the more special diseases to be referred to the proper specialist.

From sentiment we regret, in many way, the passing of the old family physician who, tho' knowing less of scientific medicine, was with his common sense and kindly ways the beloved of his clientele who trusted him and stuck to him thru' thick and thin.

The new order of things is a natural outgrowth of the demands of the laity Tho' the present day habit of changing from physician to physician is to be deplored still there is no question but that it is a stimulus to the physician to do his best when he knows that if unsuccessful, the patient will probably try another on short notice. Again specialists have developed who are supposed to know all that there is to know on their branch of medicine.

What would be the ideal relationship between the general practioner and the specialist? Wherein lies the fault that there is so often a clash between them? We think that it is divided between them. Let each act unselfishly for the patients good and with proper sense of neighborly duty toward the other. In other words give the conscience a chance to make itself heard and listen to it.

It is the duty of the general practioner to send to the specialist all those cases in which he feels that he is not competent to give a correct diagnosis and the best treatment known. He should not procrastinate until the patient either asks for a specialist or goes on his own account.

The specialist should know his speciality thoroughly and not narrowly but based on a good foundation of general medicine. When he reads papers in the medical societies, may they not be too technical or special with the attempt to impress his hearers with his profound knowledge. In order that the latter may not smile and despise him, let him give the general practioner, points which are of use to him mentioning treatment that belongs to the specialist, principally to let it be known there is such a treatment which is followed by good results. He should give plainly methods of recognizing the cases which should be sent to the specialist and give the treatment in detail of the affections which could be taken care of by the general practioner.

The specialist should at consultations and at all times treat the physician with respect. Again when a patient who has been referrred to him is discovered to have some other complaint or develops one, the rule of sending him back to the original physician, should be rigorously carried out in every instance. The same thing applies of course to the cases where the specialists does not care to carry out the treatment himself and can outline it for the physician.

We feel that if both the specialist and general practioner would really practice the golden rule all would be for peace and not only would the patient be benefited but the profession individually and collectively.

FEAR OF THE HOSPITAL.

Why is it that so many people look upon the hospital as a place of horror and fear? The only explanation that we are able to offer is their ignorance of the good these institutions are doing for our country.

In the large cities where the people are better educated and know more about hospitals, this fear has greatly subsided, and they have come to recognize them as natural places of resort in severe illness, whether the case be medical or surgical.

They come to understand that they can be more skillfully cared for in a well regulated hospital, than they can possibly be taken care of in their own homes, no matter how comfortable it may be.

We often hear people, who are not familiar with advantages and values of first-class hospitals say "I don't want to be carried to a hospital to die, when I get sick. I'd rather remain at home and have my mother or sister nurse me." This is purely an absurdity. No patient was ever taken to a hospital to die. They are taken for the restoration of health and strength. This of course can be brought about a great deal more rapidly in a well equipped, well managed hospital, and where nurses are technically trained.

Then too there are so many people who live in the country and smaller towns, who do not come in direct contact with hospitals or institutions for sick people, and therefore don't give them much thought until their family physician, perhaps, announces the fact that some one in their community has been taken to a hospital in a neighboring city for treatment. Then everybody in the whole community knows about this "horrible act" in a very short time. They begin to recall the number of people whom they knew who "died in a hospital."

This is explainable by the fact that they are out of touch with hospitals and don't see the 99 cases that regain the health, but only see possibly the one who dies.

A hospital for the better class of patients is practically a well regulated hotel for sick people. Until the medical profession, and the public keep this one fact in mind, there will remain, a prejudice against hospitals.

The time seems to be approaching, how-

ever, when people will fear hospitals less than they have in the past.

Even now they are looked upon with a great deal less dread than they were a few years ago.

"NO MAGIC IN THE KNIFE."

There seems to be a growing tendency among the laity, to regard a surgical operation as the modern cure all, and a panacea for all the ills that flesh is heir to. They seem to think that the magic touch of the knife removes all trouble and that the healing of the wound by primary union heralds a return to immediate health. We believe that this tendency is fostered to a great extent by the attitude of some surgeons, whose number seems to be on the increase, in the matter of early discharge of patients after operation, with only the slightest attention to the care they are to receive after leaving their hands.

While this attitue may be the result of an anxiety to lessen the tendency to post-operative neurasthenia, we believe that in the end it defeats itself. The practice is not good for the vast number of patients, and is far from good for the cause of surgery in general. While it is possible, under modern methods, to discharge a patient from the hospital in from a few days to a week or two, often a capital operation, the doing so does not indicate special operative skill or dexterity and may well mean a serious reflection upon surgical judgment.

Granted that a patient has a disease, which we believe best treated by operative means—still the very fact of operation is in itself a serious arrestor of the vital processes and the patient is for a time made worse by our insult to nature. All we can hope to do by operative means is to remove pathological organs or the products of pathological processes, which if left to nature, would not be overcome and gotten rid of by the body, and thus place the patient where nature is able to take up the work, so well begun by the surgeon, and gradually restore him to health and strength. The process of restoration is scarcely begun by the time the wound is healed, and we believe that the patient should remain under the watchful care of the surgeon longer than is now the habit; and when he leaves the hospital, all the facts in the case should be placed in the hands of attending physician so that he may intelligently encourage and direct him until he is fully restored to health. If a closer relation of the surgeon and the interest in the after-treatment of surgical cases, were cultivated, we believe that it would redound to the credit of both medicine and surgery, and would be the greatest benefit to the patient who is most to be considered. The cases of post-operative neurasthenia would be fewer, and there would be a larger percentage of complete recovery following operation. While the knife is a wonderful instrument to accomplish our end let us not regard it as a fetish, but assign to it its true place in our armamentarium for the relief of suffering humanity.

HUMAN MILK.

Few practitioners realize the great value of human milk for babies or at least if they do so theoretically, we find that the practice of many does not uphold such belief.

To nurse a child at the breast is such an old fashioned and commonplace habit and the patent baby food is so covenient and well advertised, that when the mothers milk shows signs of being inadequate, it is so easy for the doctor to say "Wean the baby and put him on So and So's food" and then think that he, as the physician, is relieved from responsibility.

By so doing he has robbed the babe of his birthright, without an effort to remedy natural conditions. He has taken away a vitilizing and life giving food for which no substitute of equal value can be found. We all must know that there are certain antitoxic and immunizing qualities in mothers milk which make the child stronger and more resistant to disease and which are contained in no other food.

For that reason even small amounts of milk are better than none. If the mother can nurse the babe only once or twice a day by all means use what is available and do not cut the child off entirely.

But, with encouragement and kindly advice from the physicians many more mothers than at present, could conserve, increase or enrich their breast milk and thus many more babies lives be saved. For, it is the artificially or bottle fed babies from which the high infant mortality comes and not from the breast fed ones. In order to have the mothers milk adequate, the physician must keep this object in mind during prenancy and during confinement and especially during the months succeeding the birth of the child.

It is needless to go into all causes of breast milk failure but the principal ones are anagmia, worry and physicial fatigue from overwork or loss of sleep. These are conditions which usually can be overcome or prevented.

Then the diet of the mother can be changed if necessary to make her a better milk producer, but do not give her beer or alcohlics for such purpose.

To those who have never tried it, a good sized bowl of corn meal or oatmeal gruel

given to the mother twice daily will work wonders with the milk supply.

But, some one asks, what about those cases where the mothers milk does not seem to agree with the baby? Those cases also are more apparent than real, and can be overcome by careful management. Usually the baby is nursed too often, or the mothers milk is too rich in cream and can be diluted by giving the child a small amount of water or barley water, before each nursing, or the child is constipated or there is a lack of outdoor exercise and air for babe or mother or there are other faults which can be corrected.

In any case we should not give up nursing the baby until we have made even more of an effort to keep him at the breast than we would make to keep him on the bottle.

And when the mothers milk really does begin to fail and it is insufficiant to make the child gain in weight properly, it is much the better plan to substitute one or two bottles of diluted cows milk for the same number of breast feedings and keep the child at the breast the rest of the twenty four hours and not wean it entirely.

In other words, until the child is six or eight months old use what breast milk is available and do not destroy or take away Natures own source of food supply without an intelligent and persistent effort to remedy conditions.

IMPORTANCE OF EXAMINATION OF THE STOOL.

In these days when the clinical labratory has attained such a high degree of usefulness in aiding exact diagnosis one proceedure, simple and of great importance, has apparently been rather overshadowed by some of the more showy tests. This is the careful examination of the stool, particularly in cases complaining of digestive disturbances and in patients suffering with anemia. While useful information has been gleaned from this source in the past it is especially valuable now that we have the more perfect tests for blood which enable us to recognize minute occult bleeding in the digestive tract. Again the examination is particularly in order now that the prevalence of hookworm thru' the South to such a marked degree has been proven.

True, the examination is not the most pleasant thing connected with medicine but those who do most of this work insist that when a regular system is employed and proper but simple apparatus is at hand it is not so very disagreeable. The doctor who takes the time and trouble required will frequently be amply repaid. A specimen of stool can always be obtained with little trouble and, excepting for the miscroscope, no other expensive apparatus is revuired Even ordinary microscopic examination by the physician will often give valuable information which would have been missed had simply the nurse, relative, or patient been casually asked concerning the appearance of the movement. Some patients might be saved operations based upon a faulty diagnosis of appendicitis, gall stones or what not because of pain of cramplike nature through the abdomen, due to the mucus colitis

Small gall stones found in the movement give a useful hint that all is not right in the billiary apparatus, Pus and blood fouud in the stool sound a warning. They come from some condition which must be found.

Tests for occult bleeding by Adler benzidine test introduced about six years ago and since modifieh and improved by several clinicians are of the greatest importance. As has been known for some years cancer is characterized by a centinvous oozing of blood which is invariably shown by a positive benzidine reaction. Ulcer of the stomach and duodnum which give an intermittently positive test could be recognized far oftened if the reaction were oftener used.

The degree of ultimate digestion of the various food stuffs can be found my microscopic examination of the fecal residue. As Dr. Edsall says, "We want to know how the patient digests the food taken in his ordinary diet," and therefore it is not necessary in the ordinary case, or even advisable, to use Schmidt's test diet.

Of particular value to the Southern practioner is the examination for ova and parasites. The recognition and removal of the scourage of the South, hookworm disease, falls te the general ann particularly the general and particularly the country practioner. The profession and laity are awakening to a sense of their responsibility along these lines. The wide and general distribution thru the South is known and the percentage of population affected is enormous. Thru' the case of those already infected and the spread of prophylaxis who can say how far reaching will be the effect physically and economically on this part of the country?

The examination of the hook worm takes longer than the ordinary examination of of the stool, unless a large number of the parasites are present. The mild cases are difficult to diagnosis according to Bass and the ordinary examination is often insufficient to find the eggs. In these cases he recommends diluting the feces with water

10 times and, after centifuging, the supernatant fluid is poured off and the proceedure repeated until the debres is gotten rid of. The sediment is then examined. In addition to this technique, he advises, after a purgative, giving a milk diet for several days before the examination in order to have the movement as free as possible from detritis.

The more complicated examinations of the stool, as for ferments in pancreatic disease, etc., are hardly practicable for the general practioner but if the simple routine examination of the movement is oftener made the physician will have the satisfaction of making more correct diagnosis, will have the satisfaction of making more correct diagnoses, will have a better idea of his cases and will be amply repaid.

EDITORIAL NEWS ITEMS.

At the December meeting of the Mecklenburg County Medical Society, Dr. A. M. Whisnant was elected President for the ensuing year. The vice-presidents elected were, Drs. C. N. Peeler, J. W. Clifford and W. W. Pharr; Secretary and Treasurer, Dr. W. H. Wakefield, Jr.

At the last meeting of the Johnston County, N. C. Medical Society, the following officers were elected for the ensuing year: President, Dr. Thel Hooks, Smithfield, N. C.; Vice-Pres. Dr. Geo. D. Vick, Selma, N. C.; Secy. and Treas., Dr. R. P. Noble, Selma, N. C.

Dr. R. J. Noble was appointed as delegate to the approaching meeting of the North Carolina Medical Society.

The Beaufort County Medical Society was formerly reorganized on September 30, when the following officers were elected: President, Dr. D. T. Tayloe; Vice-President, Dr. H. H. Hunter; Secretary, Dr. H. W. Carter.

A Consolidation of Medical Journals.

Announcement is made that on January 1, 1911 the Kansas City Medical Index-Lancet will be merged with the Medical Herald, thus bringing about a consolidation of two of the oldest independent medical journals in the West. The consolidated journal will be under the editorial direction of Dr. Charles Wood Fassett, of St. Joseph, and Dr. S. Grover Burnett, of Kansas City.

Atlanta College of Physicians and Surgeons.

Announcement is made of the receipt of $50,000 to establish and equip ladoratories of histology, physiology, and embryology. Dr. Harry S. Bachmann, of Philadelphia, has been elected professor of physiology; Dr. Justin F. Grant of Morgantown, W. Va., professor of embryology and histology, and Dr. W. W. Funk, of Philadelphia, has been appointed adjunct professor of bacterology.

Messum, in the Transvaal Medical Journal, records the use of Deycke's Nastin in cases of leprosy. Details are given of 22 cases treated, but the results have not been encouraging. At first the patients having heard much of the drug were greatly pleased with results, but they soon found that the improvementwas not continued and some even became indignant because their condition was thought to be worse than before treatment commenced.

The Medical College of South Carolina began its eighty-second annual session on October 3rd. The principal address was delivered by the Hon. James Simons, a member of the board of trustees. A new feature of this year's work will be a special course of lectures on sanitation and tropical diseases by Dr. Baylis H. Earle, of the United States Public Health and Marine Hospital.

The Tri-State Medical Society of the Carolinas and Virginia.

The thirteenth annual session of the Tri-State Medical Associaton, will be held at Raleigh, N. C., February the 22nd and 23rd. 1911, under the presidency of Dr. Joseph A. White of Richmond, Va.

The approaching meeting will, from the present indications, be largely attended. Several prominent specialists outside of the three states, will be there and read papers. Those who intend to read papers are requested to send the titles to Dr. J. Howell Way, Secretary, Waynesville, N. C.

Dr. William H. Poston, a popular young physician of Florence County, S. C., and Miss Mary Dobson, of Yorkville. S. C., were married at the home of the bride's parents, on December 14th.

Dr. Poston graduated in Medicine from the South Carolina Medical College.

Dr. James Peter Glenn. and Miss Carrie Douthit, both of Sandy Springs, S. C., were married on December 29th.

Dr. Glenn is a graduate of the South Carolina Medical College, and is very prominent in the medical profession of his community.

Dr. John Watkins Williams, of Everetts, N. C., and Miss Bertie Lenobia Gardner, of Williamston, N. C., are to be married on January 18th.

Dr. Williams is a very prominent young physician. He graduated in Medicine from the University of Maryland in 1906.

Dr Frank D. Mower, of Newberry, S. C. and Miss Mina Seay, were married on Dec. 19th, The bride was one of South Carolina's most popular trained nurses

Dr. Mower is a very prominent young physician of Newberry, where he and Mrs. Mower will make their home.

Dr. Mower graduted from Tulane University with the class of 1907.

Dr. J. R. Culberson, a very prominent physician of Laurens county, S. C., died at his home in Gray Court. on December the 5th, after a long illness.

He was 65 years old.

Dr. W. B. Young, a successful and popular young physician, of Rock Hill, S. C., died at the Florence Infirmary. Florence, S. C., on December the 20th.

In 1904 Dr. Young graduated from the Medical College of South Carolina. He was thirty-three years of age when he died.

The Sixth District Medical Society of Georgia at its semi-annual meeting on November 9, elelected the following officers for the ensuing year: President, Dr. Marcus Carson, Griffin; Vice-President, Dr. E. M. Green, Milledgeville.

BOOK NOTICES.

Pellagra; by Dr. A. Marie, Physician to the Asylum, Department of the Seine, Editor-in-Chief, Archives de Neurologie, and Director of the Laboratory of Pathological Psychology, Ecole dei' Hautes Etudes, Paris. With introductory notes by Professor Lombroso. Authorized translation from the French, by C. H. Lavinder, M. D., passed Assistant Surgeon U. S. Public Health and Marine Hospital Service, and J. W. Babcock, M. D., Physician and Superintendent, State Hospital for the Insane, Columbia, S. C. With additions, illustrations, bibliography and appendices.

Pellagra is a desease of the highest importance. It is endemic-epidemic in its nature, and for nearly 200 years has been a problem of paramount importance to the physicians and publicists in Southern Europe. Important legislation has been enacted for, large expeditures of money have been made in, and talent of the highest order has been devoted to the solution of a problem which has proved the gravest menace to public health.

The United States was thought to be free from this disease, but within the last three years it has been reported from many sections of our country, and is now known to exist in at least 34 States. The experience of certain European goverments has given ample proof of the seriousness of this problem, and now that it has appeared in our country it behooves every American physician to become familiar with its symptomatology and diagnosis; not only that he may be able to diagnose and treat the unfortunate victim that may fall to his care, but also that he may make report in order that the importance of this public health problem may soon be recognized.

Unfortunalely, the American medical profession is unfamiliar with the entire subject, and when information is sought for very little English literature is to be found, and that not of a comprehensive character. For this reason this book has been prepared. It is a 12 mo. volume of about 430 pages, with twenty illustrations, and covers the subject in a scientific and comprehensive manner. Annotations and additions have been freely made by the Translators in order to make the work more suitable for the American reader. The type of the disease as seen in the United States, and the brief experience of American medical men, have received a full share of attention. No effort has been spared to make this a treatise which will be of value and help to the American profession.

Pracital Points in Nursing for Nurses in Private Practice, with an apendix containing, Rules for feeding the sick; Recipes for Invalid foods and Beverages; Weights and measures; Dose List; and a full glossary of medical terms and nursing treatment. By Emily A. M. Stoney, Graduate of the Training School for Nurses, Lawrence, Massachusetts, late Superintendent of Training School for Nurses, Carney Hospital, South Boston, Massachusetts. Fourth Edition, Thoroughly Revised, containing 97 Text Illustrations and 8 colored and half-tone plates. Philadelphia and London, W. B. Saunders Company, 1910

The continued and increasing popularity of this volume has justified the preparation of another thoroughly revised edition.

A large amount of entirely new matter has been added in this volume, and the entire manuscript has been thoroughly revised,

Those portions of the book which treat

of nursing in various diseases have been greatly amplified in accordance with the progressive spirit of medicine and its handmaid, nursing.

It certainly gives us a great deal of pleasure to recommend this book to the nursing profession.

An Epitome of Hygiene and Public Health. By George M. Pirce, M. D., formerly Inspector New York State Tenement Commission, Medical Sanitary Inspector, New York Department of Health. 12 mo. 255 pages. Cloth, $1.00, net. Lea & Febinger, Publishers, Philadelphia and New York, 1910. (Lea's series of Medical Epitomes, Edited by Victor C. Pederson, M. D., New York.

Hygeine may justly be said to be the most important of the medical sciences. The old adage "that an ounce of prevention is worth a pound of cure" does not fully state the case, for it remains to be said that preventive medicine deals with the maintenance of the health of thousands, whereas curative medicine renders its benefits to individuals singly. The immensity of the subject and the volumes that have been written on single sub-divisions exceed the time and attention which the average reader can bestow, hence the value of an authoritative epitome like the present one. Dr. Price is already well known as the author of several works on the subject and as a sanitary expert for the City of N. Y. during ten years. He is therefore fully qualified to know his subject in every aspect and to perform the always difficult task of condensation with good judgment. The reader mastering this small volume will be well fitted for examination and for putting his knowledge into practice.

The Practice of Surgery by James Gregory Mumford M. D., Visiting Surgeon to the Massachusetts General Hospital; Instructor in Surgery in the Harvard Medical School; Fellow to the American Surgical Association, etc. With 682 illustrations Philadelphia and London, W. B. Saunders Compay, 1910.

The writer of this very valuable book conveys the idea that he wants only to present a short treatise on the practice of surgery. The volume however, seems to be quite complete.

He omits in part, the principles of surgery, except incidentally when the course of argument seems to call for such consideration.

The author says in his preface: "Within youthful memory even the field of surgery has broadened so enormously; so many new sujects have come within its embrace; knowledge of its manifold expression has become so extensive; its study is now found to expand into so many branches, and its roots to penetrate so deeply, that a sound comprehensive knowledge of all its parts is no longer possible to a single individual or to be condensed as I wish to condense this work."

In this book the author assumes the readers preliminary training, and has endeavored to present to him the Practice of Surgery as surgeons see it—as a subject of unending variety and importance, as a pursuit of the deepest human interest.

This volume is beautifully bound, carefully indexed and contains 1015 pages of reading matter. The illustrations are very good indeed, and withal The JOURNAL takes pleasure in recommending this volume to its readers,

Physical Examination and Diagnostic Anatomy. By Charles B. Slade, M. D., Instructor In Physical Diagnosis, University and Bellevue Hopital Medical College, New York. 12mo. of 145 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, $1.25 net.

As the title of this book indicates, it is intended for a text book, its technic fundamental methods and principles, to prepare the student for the study of any of the various able and comprehensive works already written upon Physical Diagnosis.

The diagnosis of specific disease conditions has been carefully avoided as this work deals chiefly with the normal subject.

The author has arranged the subject matter to accord with what he believes to be the natural course that the average minded student pursues in acquiring knowledge regarding any subject which attracts spontaneous interest.

We take great pleasure in recommending this little book to medical students.

Bacteriology and Surgical Technic for Nurses. By Miss Emily M. A. Stoney. Third edition, revised and enlarged by Frederic R. Griffith, M. D., 12 mo of 311 pages with 204 illustrations. Philadelphia and London. W. B- Saunders Company, 1910. Cloth, $1.50 net.

This little volume contains an immense amount of valuable instruction for nurses on "Bacteriology and Surgical Technic." The first part of the book is devoted to Bacteriology and Antiseptics; the second part to Surgical Technic Signs of Death, and Autopsies.

The author has made no attempt to write a complete treatise on bacteriology, but merely to outline and simplify that branch

for nurses.

This volume is very complete, and it gives us a great deal of pleasure to recommend it to nurses. The illustrations are numerous and are very good indeed. The binding is quite attractive and the index is thoroughly complete.

A Treatise on Diseases of the Skin. For the use of advanced Students and Practitioners. By Henry W. Stelwagon, M. D., Ph. D., Professor of Dermatology, Jefferson Medical College, Philadelphia. Sixth edition, revised. Handsome oclavo of 1195 pages, with 289 text-illustrations, and 34 full page colored and half-tone plates. Philadelphia and London: W. B. Saundes Company, 1910. Cloth, $6.00 net; Half Morocco, $7.50 net.

This volume is one of very great value to the medical profession. The fact that this is the sixth edition of this volume will in a measure explain its popularity and worth.

A great part of this book has been wholly rewritten and entire manuscript has been thoroughly revised. Also many articles on new subjects have been included, such as: gangosa, tropical ulcers, and ulcerating granuloma of the pudenda, granulonia annulare and lichen nitidus.

The appearance of so many well fitted illustrations, add a great deal to the clearness of the text. This volume is one that we are glad to recommend to practitioners and medical students.

Renal, Ureteral, Perirenal and Adrenal Tumors and Actinomycosis and Echinococcus of the Kidney. By Edgar Garceau, M.D., Visiting Gynecologist to St. Elizabeth's Hospital and to the Boston Dispensary, Boston; Consulting Gynecologist to the city Hospital, Quincy, Mass., etc. Octavo; 421 pages; 72 illustrations. New York and London: D. Appleton & Company, 1909. Price, $5.00.

This interesting monograph represents a large amount of bibliographic and laboratory study. In it Garceau has described "only that which has stood the test of the microscope," attempting thus to clarify much of the confusion that has arisen in and from the older classifications of renal neoplasms. The history of hypernephroma since (and before) its recognition by Grawitz in 1883 as arising from aberrant adrenal tissue, may be cited to illustrate what, this confusion in pathogenesis and nomenclature has been. Garceau's pathologic studies are based chiefly on carefully preserved material in the Massachusetts General and Boston City Hospitals. The work, however, is not limited to pathology, but deals as well with symptomatology, diagnosis and treatment (usually removal), and it contains many interesting case records.

Garceau adopts the following simple classification of solid tumors of the renal parenchyma: 1. Malignant—hypernephroma; carcinoma (pure carcinoma, he says, very rare); sarcoma (round cell-, spindle cell-, fibro-, aveolar-, lipo-, anglo-sarcomata); adenoma. 2. Benign—adenoma; andioma; lipoma; fibroma, The book describes these and the following; embryonic tumors; tumors of the kidney, pelvis and ureter-papilloma, epithelioma, sarcoma; polycystic kidney; simple serous cysts; perirenal and adrenal tumors (from the literature); actinomycosis; echinococcus. Finally, there is a chapter describing the various tests for determining renal efficiency.

The Practice of Medicine, a Guide to the Nature, Discrimination and Management of Disease, by A. O. J. Kelly, A. M,, M. D., Assistant Professor of Medicine in the University of Pennsylvania and Assistant Physician of the University Hospital, Philadelphia; Professor of Theory and Practice of Medicine in the University of Vermont; Professor of Pathology in Woman's Medical College of Pennsylvania; Physician to St. Agnes' Hospital, Philadelphia; Chief of the Pathology Department of the German Hospital, Philadelphia; Member of the Association of American Physicians and of the Interurban Clinical Club; Editor of the American Journal of the Medical Sciences. Illustrated. Lea & Febiger, Philadelphia and New York, 1910.

We believe that the author of this very valuable volume has succeeded wonderfully in his endeavors to prepare for the student of medicine, and the junior practitioner, a guide to the nature, discrimination and management of disease, containing the essentials unadorned with great detail.

Inasmuch as the final object of medicine is practice, most space has been devoted to symptomatology, diagnosis and treatment.

The section on pathological physiology are not very extensively expanded in this volume, but the statement of the main facts will be of great service to the medical student, and we believe will give them a broad view of disease and of disturbed functions in general.

It is our opinion that this volume is very complete and it gives us a great deal of pleasure to recommend it to the medical practitioner and also to the medical student.

Sunshine Annie.

By Josephine Scribner Gates, author of the Live Doll Books. Illustrated by Fanny Y. Cory, $1.25. The Bobbs-Merrill Company, Indianapolis.

It is the creator of live dolls that Mrs. Josephine Scribner Gates has come to be known best to the world of little girl readers. But this time she has given them something even better. Better than live dolls? we can hear them exclaim incredulously. Yes, as much better as live dolls are better than the ordinary stuffed-with-sawdust kind. This time Mrs. Gates tells of a dear little girl whose name is Annie and who is so merry and bright all the time, despite the fact that she is an orphan, that her adopted mother is poor and that she has to work hard all the long day in a great dry-goods store, that she is known to every one as Sunshine Annie. This little girl, of tender hearted, so lovable and so radiatingly happy, is the life of the orphan asylum which is her first home, of her department in the great store, of her adopted mother's home and of the fashionable young lady whose whole nature she changes. The story of Annie's experience as a missionary of happiness is built about the popular poem by James Whitcombe Riley, "Little Orphant Annie," which is made to fit the career of this small heroine very snugly. Annie's sympathy for the cheap, homely dolls on her shelves and her anxiety to have them find homes where they will be lovingly cared for, is pretty and endearing. Sunshine Annie is a real and most delightful addition to the favorite characters in Storybook Land; to know her is to love her and to be the better for it. With its pictures in color by Fanny Y. Cory, the book is especially attractive.

Lippincott's and the New Year.

Lippincott's Magazine wastes no time in beginning to fulfil its promises of good things to come during 1911. The January issue opens with a thoroughly delightful complete novelette entitled "'Lista," by Zona Gale, famous for "The Loves of Pelleas and Etarre," "Friendship Village Love Stories," and other worthful books. "'Lista" is a tale of rural Wisconsin, a section hitherto virtually unexploited in fiction. The heroine is a farmer's daughter, who has some surprising experiences, in which are also concerned a man (of course), 'Lista's little sister, no less a personage than the Mayor of the town, the Mayor's daughter, and some city folk.

There are a number of unusual short stories in the number, including a newspaper yarn called "The Pledge That Stuck," by George L. Knapp, whose recent novel, "The Scales of Justice," has made something of a hit. "The Bravery of Jules Lasalle," by Nevil G. Henshaw, author of "Aline of the Grand Woods," is a Louisiana story of queer but interesting people, "The Bond," by Charles Harvey Raymond is a striking story of the Philippines in time of peace. Charlton Lawrence Edholm's offering is a humorous story called "The Missionary Hens." "Mr. Williams of the Parks," by Thomas Chesworth, is a cleverly told tale with an unexpected denouement. "Billy's Incantation" is a Southern sketch of rare charm.

All who think our Congressmen's lot comparable to a bed of roses should read Willard D. Eakin's article, "The Temple of Trouble." Mr. Eakins is the private secretary of one of our Representatives, so he knows what he is writing about. Noteworthy papers to be found in the department "Ways of the Hour" are "Stomachitis," by Edwin L. Sabin; "Criticism," by Ralph W. Bergengren; "Earn Your Child's Friendship," by Jane Belfield; and "Do Men Lack Culture?" by Joseph M. Rogers.

The freshest characteristic humor of the American fun-maker is found in the department "Walnuts and Wine." There are also poems of power by Ethel Colson, W. Dayton Wedgefarth, Charles C. Jones, Walter S. Trumbull, and Shaemas O'Sheel.

Abstracts of the Leading articles of the month.

Congenital Dextrocardia.—Foggie (Edinburg Medical Journal) remarks that the diagnosis of congenital dextrocardia depends on the recognition of the dextrocardia and the proof of its being congenital. Dextrocardia is recognized by the absence by all the usual clinical methods of a heart on the left side and its presence on the right side. This implies in straightforward cases that an apex beat, or presumably such, is beating on the right side, and can be confirmed by palpation, that percussion supports the underlying presence of a heart, and that auscultation gives heart sounds of such strength and tone as such a change in position would lead one to expect. All this is generally described in typical mirror cases, but of course it may be modified if the heart is merely a little to the right of the middle line. Many of the cases described respond quite readily to these methods of examination, which have been applied to their solution. At the same time these methods have their limitations, as cases which

were presumed to be dextrocardia have pathologically been found to be merely enlargements of the heart to the right. Further, these methods, without a complete anamnesis, cannot exclude lateral displacement of considerable degree. The other means of detemining the presence of a dextrocardia is by the newer x ray method. While it confirms the dextrocardia, its most hopeful use is in determining the axis of the heart. In real congenital dextrocardia the axis should run from above and left downward and to the right, and not as in more lateral displacement with so often merely an axis parallel with its original, or only slightly less slope to the right, As a necessary sequel to the recogniton of the dextracadia there is the need to exclude any general inversion of the other organs. The second point is to determine the congenital nature of the displacement, which is only noted in a very few instances. Where it was so observed, the next point obviously is to settle whether it is of intrinsic or extrinsic origin. This in itself is no easy matter, and many cases reported as true dextrodadia have at a later date been shown to be due to the extrinsic causes. If there is no note as to the condition from birth, then a proof of its congenital nature has to rest on a personal history free from such chest coditions as might cause displacement, along with a physical examination that supports this contention. The special points requiring establishment are the free movements of the heart and the lungs, equal respiratory murmur on the two sides, and absence of any change in the shape or size of the chest that might be suggestive of past disease. An x ray examination is also useful here in showing a healthy lung condition and in defining the level and the movements of the diaphragm, and thus helping to exclude past pleurisy or pulmonary retraction.

Actinomycosis of the Orbit.

Muller (Beitrage zur klinischen Chirurgie,) states that the orbit is very seldom the seat of actinomycosis. A case is reported from von Brun's clinic, and nine cases are cited in detail from the literature. The Dr's case was the first to be operated upon by temporary resection of the upper part of the cheek-bone, a procedure which is considered superior to Kronlein's resection of the lateral portion of the orbit. The chief symptoms were exophthalmos and failure of vision in the affected eye. There was also lack of mobility of the eyeball. These symptoms are, however, not pathognomonic of actinomycosis, it being essential to an exact diagnosie, that ray fungus be found in the pus. As soon as a diagnosis is made or there is a well grounded suspicion of this disease, steps should be taken to radically remove the focus of infection. In none of the cases reported in the literature was radical removal attempted. Although the author's patient died about six weeks after the operation from extension of the disease to the meninges, this is no argument against radical removal, for it is probable that, if operation is done early, the disease will be entirely cured by this means. In all the other cases reported with statement of after-results death took place. However, the only operation was that of incision and curettement. The failure to do radical operation is accounted for in some cases by the presence of the disease elsewhere in the body, and in others by failure to recognize the true nature of the disease. The duration of life in the cases reported has varied from four to fourteen months after the onset of symptoms.

Vaccine Therapy in General Practice—McWalters in an interesting paper summarizes the important points regarding this therapeutic method. He states that the subcutaneous introduction of dead bacteria into the human organism is followed by a definite succession of changes in the opsonic content of the blood if the dose is sufficiently large. There is an immediate fall in the quantity of opsonins, followed by a rise above that prior to the inoculation, then a gradual return is made to or below normal. These are the negative and positive phases and the phase of increased resistance. During the first there is a lowered resisting power to that organism, in the other two a greatly increased resisting power.

Unless the dose has been excessive the negative phase is of but short duration, followed immediately by a prolonged, well-marked rise of the index, higher than the point at which it stood prior to inoculation. These phases are shown clinically by changes both in the focus of infection and in the general condition of the patient. After a time dependent on the dose and the idiosyncrasy of the patient, this improvement wanes, and he tends to return to his original condition. Our aim should be to arrange the sequence of doses that the patient receives another dose before his phase of increased resistance has terminated, thus obviating a negative phase low enough to cause distress. It necessarily follows that when a patient's index before treatment is low the dose should be sufficiently small to produce an almost negligible negative phase so that the reaction which brings his index up to nearly normal allows us to give him another dose, bringing his index still higher.

The author has been most successful in treating acne, boils, carbuncles, suppurating small wounds, styes, impetigo, bullous onychia, chronic ulcer of the leg, tuberculous glands, and many cases of chronic suppuration from various causes.—The Practitioner, London.

Injection of the Broad Ligaments with Quinin for Prolapsus Utera.—Dr. Parsons (Journ. Obst. and Gyn. British Empire.) reports that out of 178 cases treated by this method only three had suppuration, and these were women exhausted by large families and in low condition. The best time to operate is a week after menstruation is over. An anesthetic is advisable, and a catheter should be passed to ascertain to what extent the bladder falls down on each side of the uterus. A Sim's speculum is passed and a large retractor to draw the bladder well up and out of the way. A straight sound is passed into the uterus and held horizontally by the operator while the syringe containing the solution is introduced. The injection is made on each side of the uterus through the vaginal wall at a distance of ¾ of an inch from the cervix and a little below the level of the external os. The needle is about one inch long. The site of the injection should be half way between the normal position of the cervix and the pelvic wall, so that the uterine artery, veins and ureters lie inside above the needle. After the injection is made the uterus is anteverted and a cup and stem pessary inserted. This is worn for three days, and the patient is instructed to lie on her face and side, so as to throw the uterus forword. In minor cases a perineorrhaphy may be done at the same sitting, in which case a pessary cannot be worn, and then the patient's hips are kept raised so as to keep the uterus higher in the pelvis. The solution used is 12 grains of quinin sulphate dissolved in 30 minims of dilute sulphuric acid and 30 minims of distilled water, from 40 to 80 minims of this solution being injected on each side in ratio to the extent of the prolapse. Ten mihims less are injected on the left side than on the right, on account of the presence of the rectum. The patient must be kept in bed at rest for 10 to 14 days in first stage cases of prolapse, and longer in the more severe, and anything liable to put a strain on the ligaments must be avoided for three to six months. Some cases require two or three injections, when the quantity of solution is reduced by one-third, given after an interval of 14 days. The author had 75 per cent. successes, 20 per cent. improved, and 5 per cent. failures.

Hydrotherapy in the Pregnant Woman.

Keim (La Presse med.,) states that tradition has taught the laity that bathing is apt to cause abortion in the pregnant woman, and the teaching of at least one race is that the full bath is to be taken when confinement is near. On the contrary, it is probable that in persons accustomed to the daily full bath the continuance of the custom is not at all injurious. Since the pregnant woman is liable to attacks of congestion of the genital organs, especially at the time of the menses, it is not advisable to take hot baths at the period when the menses would have occurred normally. Some accoucheurs think that there is danger of the contamination of the vagina by germs from the bath water. It is certain that except in lax multiparæ the water will not enter the vagina at all. In any case the acid of the vaginal secretions will probably kill any germs that do enter. The cells of the vagina have a marked phagocytic power which will remove many germs. The full bath, by keeping up the activity of the skin, serves to stimulate the excretory function. It is well to enjoin care in taking the bath in a warm chamber and resting in bed for two or three hours after it. The bath should be moderately warm, not too hot. After the cold bath the period of reaction is such that it might cause placental hemorrhage and abortion. Hence we should have great care in presribing such baths, especially near the beginning of pregnancy. Sea-bathing is open to the same objection and to a greater one on account of the force of the waves and its consequent effect on the circulation.

Digestive Troubles and Epileptic Crises.

Rodiet gives observations on one hundred women at the Saint Yvon Asylum. Often diarrhae or constipatian is noted at the time of the convulsion. Of ten epileptics seven had digestive troubles preceding the attacks. The menstrual period is also favorable to the occurrence of the attack. In some cases the patients fail in appetite for from one to three days before the crisis. The symptoms noted most frequently in the author's cases were painful digestion, retarded salivation, coustipation, and diarrhea, acute dilatations of the stomach. gastrointestinal atony, and urine rich in skatol and indican show the presence of gastrointestinal autointoxication in connection with the attacks. These poisons acting on a predisposed organism cause the crises. If these symptoms are lessened the attacks will also be decreased in number.—Le Progr'es Medical.

Where the Censorship Fails.

No more striking illustration of the absurdity of trying to censorize the therapeu-

tic thought of the century, by the Council on Pharmacy and Chemistry or by any other body, is to be found than in the passing experienc with Erhrlich's much advertised specific for syphlis, popularly and euphoniously vlcept (a la Humfhrey) "606."

According to numerous "official" rulings all advertising of this remedy and all "mentions" of it in a commendatory way should be rigorously barred from The Journal of the American Medical Association and the affiliated state journals until the product has been solemnly quarantined, inspected and marked "passed" by the Council. Only recently one of our pedestaled practitions has stated that he would not even think of trying a remedy until its clinical investigation had been officially sanctioned. Yet the national Journal is filled with articles praising this patented, privately owned and proprietary specialty, and no great and good guardian of our therepeutic morals has risen with a single whisper of protest.

On the other hand, if this remedy is what it promises to be, one of the greatest medicinal discoveries ever made, one which will cure cases heretofore thought incurable, saving thousands of lives, isn't it the duty of every physician to learn all about it as quickly as possible, and the duty of every medical journal to give all the available facts concerning it? And what has the Council got to do with it—or with us—in the meantime.

It seems to the writer that the editors of some of our truly good journals are astride a dilemma, which just at present must be bucking like a Texas bronch.—Exchange.

Post Grippal Asthenia.

Of all the acute infections to which human flesh is heir, none seems to be followed such general prostrations as La Grippe. As the Irishman aptly described it, it is " the disaise that keeps ye sick for a month after ye get well." The general devitalization that ensues after the subsidence of the acute symptoms appears to be entirely out of proportion to the severity of the original attack. It is therefore distinctly the part of clinical wisdom to inaugurate a vigorous reconstructive campaign as soon as the febrile movement subsides. Plenty of fresh air, an abundance of nutritious but easily digestible food, and regular doses of Pepto-Mangan (Gude) constitute a trio of therapeutic measures of marked benefit. If the heart action is unduly weak, or if the prostration is more than usually pronounced, an appropriate dose of strychnia added to the Pepto-Mangan is of considerable additional service.

The Passing of Cod Liver Oil.

For many years, in cases where the need of fats was apparent, it has been customary to prescribe cod-liver oil. This oil is fairly digestible but is very prone to upset the stomach, and many patients will not take it on account of its vile taste; it is practically impossible to disguise this vileness—the chemist has tried loading it with all sorts of aromatics and flavors with little success. The fishy taste persists in spite of everything.

In tuberculosis and other chronic ailments the low vitality reflects seriously upon the stomach; for this reason cod liver oil in many cases simply complicates matters by interfering with the digestion of other foods. Another objection to it is its tendency to become rancid (in common with all animal fats) with the formation of certain fatty acids of a toxic character. The rancidity is sometimes concealed in highly aromatized emulsions but, just the same, they are unfit for use and productive of harm.

Corn oil is a good substitute; as emulsified by The Abbott Alkaloidal Company of Chicago, it is pleasing to the taste and keeps well. They sell it under the name of Emulsion Maizole. It is now prescribed throughout the country in place of cod-liver oil and other nausea provoking fats. It is accepted without protest by the most fastidious patient. It has high food value and in all maladies in which there is waste of tissue and vitality—where extra nourishment in quickly available form is required Emulsion Maizole is. We urge all our readers to investigate this new corn oil preparation,

Post-Grippal Complications.

If there is one particular feature which characterizes the genuine influenzal attack, it is the decided and sometimes intense prostration that remains after the subsidence of the acute symptoms of the disease. This general vital "set back" is oftentimes entirely out of proportion to the severity of the original grippal attack, and the most robust patients are sometimes the most severely prostrated. In addition to the general devitalization, La Grippe is extremely likely to be accompanied with or followed by such troublesome complications as otitis, neuritis, sinus inflammation, gastro intestinal derangements, resistant and obstinate bronchial catarrhs and, more dangerous than all, a peculiar, more or less characteristic, asthenic, form of lobular pneumonia. The skill of the physician and the resistance of the patient are often taxed to the utmost in a combined effort to induce final recovery. Anemia, to some degree, is

almost always brought about by the combined devitalizing power of the disease and its complications, and convalescence is likely to be tardy and tedious. An easily borne, readily assimilable hematinic does much to hasten recovery and Pepto-Mangan (Gude) is an especially eligible method of introducing the much needed ferric and manganic elements, without producing or increasing digestive difficulty. In no condition does this well tried hematic remedy evidence its undoubted reconstructive power more certainly than in the treatment of post-grippal convalescence.

Subluxable and Luxated Hips in the New-born.—LeDamany and Saiget (Rev. de Chir.) states that there are two great divisions among the causes of luxation of the hip-joint; anthropological and teratological. Anthropological causes are exaggerations of all the influences that affect all individuals before and after birth. Their danger, always greater in the female sex, increases with the elevation of the races. A deformation of the femur, or its torsion, which anteverts the neck, brings about the gravest consequences. As long as the thigh is in flexion within the womb, all goes well; this torsion causes dislocation as soon as the child takes the dorsal position or the upright one after birth. These anthropological luxations are postnatal. The teratological causes are similarto those of monstrosities. Among them are failures in the development of the periarticular muscles of the hip, pelvic malformations, and vicious attitudes. They have endeavored to prove that congenital luxation does not exist at the time of birth in viable infants. Their studies showed the existence of a quasi-pathological condition of the hip which is spontaneously curable. This, the writer calls subluxable hip. They also show that most teratological luxations occur in utero. They examined 1722 infants at the Paris Maternity and that of Rennes, among whom they found a single true luxation. They found seven teratological cases. Of subluxable hips they found twenty. This results from the lessening of the depth of the acetabulum during the second half of intrauterine life, which renders the position of the hip unstable. The difficulty of adaptation of the infant to the ovoid uterine cavity exaggerates the bad position. They further say that any anomaly of the position of the lower extremity may cause luxation of the hip in the first half of uterine life. Certain pelvic malformations may cause the same condition. From birth congenital luxations of the hip are frequent enough in children affected with other deformities, especially those of the nervous system, but whose skeletons are normal. The immediate cause of these luxations is dystrophy of the periarticular muscles of the hiAmong p. new-born infants, especially females, it is quite frequent to find the subluxable hip, which is spontaneously cured. Congenital luxation of the anthropological variety is prepared in the uterus and accomplished at birth. Its pathogenic unity contrasts with the variable etiology of luxations before birth.

Bad Results of Hypoalimentation in Nurslings.—Concetti (Revista di Clin. Ped.) describes a condition resulting from hypoalimentation which is similar in symptoms to that resulting from too much food, and is often mistaken for it. Vomiting occurs from emptiness of the stomach; the stools are thin, green, and fetid; the child is restless, crying, and sleepless, and death often comes by convulsions. The symptoms only cause the practitioner to lessen the amount the amount of nutrition, diluting the milk still further and filling the stomach with water. The same condition exists in cases in which the mother's milk is deficient in quality or quantity, or the weak child is unable to draw it from a badly formed nipple. All medicines fail to ameliorate the little patient's condition; laxatives, astringents, digestives and calming drugs all fail. Only addition of more nutriment aids the child. The doctor gives illustrative cases. He uses in addition to increased nutrition a solution of the digestive ferments, pepsin, pancreatin and amylase, with lecithin, lactic and hydrochloric acid, in water and alcohol.

The Relief of Dysmenorrhea.

An analgesic that is reliable in its results and yet free from all the dangers of habit forming inseparable from opium derivatives, is absolutely indispensable to the practtitioner who meets with cases of dysmenorrhea in his rounds. This common and distressing condition yields promptly to Phenalgin. Phenalgin should be taken before, during and for a short time after the period, and, if the patient assists the determination of blood to the parts by the use of a hot sitz bath, complete freedom from pain and a most refreshing sense of relief are certain. The headache, the general sense of depression, nervousness, and anxiety, which usually accompany dysmenorrhea, are also relieved by the use of Phenalgin. It is a distinct and most efficacious nerve sedative, acting principally on the sensory portion of the spinal cord and is free from depressing action upon the heart. Women who suffer from dysmenorrhea are usually in so run down a state that

they succumb easily to the opium habit if they have been so unfortunate as to secure a prescription containing morphine, codeine, or heroin, and the scientific and humane practitioner will not dream of incurring such a risk. The great majority of these cases are not susceptible to surgical treatment, as no obvious lesion is discernable. They depend upon some obscure disturbance of nerve function and that is why they yield quickly and permanently to Phenalgin.

Other treatment is that dictated by study of each individual case; as a rule, rest and the exhibition of some tonic are all that is required to supplement the immediate pacifying effects of Phenalgin. It is not necessary to continue Phenalgin after the pain is relieved, and no craving for it will be experienced by the patient. In addition, Phenalgin will not interfere with the gastro-intestinal functions in the slightest degree. It neither diminishes secretion nor paralyzes peristalsis and it will in no instance cause constipation. Phenalgin is a welcome aid to the physician who practices among women, most of whom are unable to modify their method of life in any way, but who must have relief without danger of poisoning or incurrence of a habit.

Nitrites.

These agents reduce vascular tension especially in the incipient or presclerotic stage of arteriosclerosis, and are remarkably effective in relieving anginose pains. Amyl nitrite has an evanescent action, followed by a period of reaction with manifestly increased blood-pressure. Nitroglycerin has the same disadvantage, but is the remedy of choice in angina pectoris or hæmotysis. In the latter morphine may be given in combination with it in order to obviate the increased tension of the reactive stage. In cases of presclerosis (early arteriosclerosis), nitroglycerin may be given for 10 days, and followed by the administration of helobromin tor 10 days. Some success has been recorded from its use in symmetric asphyxia of the extremities, and in vertigo due to anæmia or Meniere's disease. Erythrol tetranitrate is less effective than nitroglycerin, but its action is more lasting. It is especially indicated in subjects of angina pectoris who are awakened in the night by the pains. Sodium nitrate yields less satisfactory results than the two last named. It is prescribed in doses of 0.15 to 0.20 gram (2 3 to 3 grains).—Hitchard and Fiessinger, Journal des practiciens.

Splenic Enlargements.

Iron and arsenic, which exert a specific action in certain forms or anæmia (including lymphoma, lymphosarcoma, Hodgkin's disease, etc., do not have a similar effect in primary splenic enlargements. Iron increases the percentage of hæmoglobin, which is continually being lowered by dyscrasic hæmorrhages, and when combined with arsenic improves the general condition of the blood; but its effects are not lasting. Iodine is practically useless, and glandular and marrow extracts have likewise given uncertain results. X-ray treatment causes general improvement in cases of Banti's disease. The splenic tumor decreases in size and the hæmoglobin percentage rises; contrary to the effect observed in splenomyelogenous leukæmia, the number of white corpuscles is increased. The rays should be applied over the entire surface of the spleen and projected through a screen of aluminium to avoid inflammation of the skin. Unfortunately the X-rays produce but temporary improvement, except in cases of infantile splenic anæmia, and the more radical treatment of splenectomy is to be preferred. The latter removes the cause of the disease and gives successful results even when performed at a late period. Cure may be obtained in cases of tuberculous splenic enlargement when the process is strictly localized; under such circumstances general methods of treatment must also be employed to prevent the bacillus from invading the entire organism.—Bozzolo La Nuova Rivista Clinicoterapeutica.

Inflammatory and Lithogenic Icterus—Riedel (Deut. Med. Wochensch.) says that the following represents the modern views on gallstone disease: 1. In fact about 80 per cent. of the cases, the first attack of gallstone colic manifests itself as a simple or infected hydrops. In about 20 per cent. of these patients bile is present in the gallbladder. 2. About 57 per cent. of the cases have a primary, large, occluding calculus in the gallbladder neck or in the cystic duct; 43 per cent. have smaller calculi above these points. The former patients usually suffer with ineffectual attacks, the latter frequently, although their attacks may be more or less effectual, or even completely so, if the calculus passes into the common bile duct or into the duodenum. 3. Ineffectual attacks in which the stone remains quiescent in the gallbladder neck or in the cystic duct are unassociated in 90 per cent. of the cases with icterus. The majority of the patients, therefore, have no icterus during their first attacks of gallstone colic. 4. In 10 per cent. of the ineffectual attacks, icterus ensues even when the calculus remains passively in the gallbladder neck or in the cystic duct. This jaundice is of an inflammatory and mostly septic type. It originates through an extension of the in-

flammation to the bile passages of the liver or to the liver structure itself. In cases of calculi situated high up in the hepatic duct, with displacement and kinking of the duct, a mechanical factor is added to the inflammation. 5. Even during the first of a series of violent attacks an occluding calculus may become impacted in the common duct, but more frequently smaller stones which have been located high up in the cystict duct are forced backward, and under these circumstances a true lithogenous icterus develops, usually of infectious origin. 6. Patients with severe ineffectual attacks without icterus, as well as those with inflammatory icterus, are to be preferably operated upon during the attack. In cases, however, in which true lithogenous icterus sets in immediately, conservative treatment is indicated unless severe infection demands rapid operative intervention.

The Treatment of Gastroptosis.—Hutchinson calls attedtion to the use of local heat for hyperesthesia of the stomach, in the form of poultices or fomentations and whenever there is general epigastric tenderness. Such means may be employed during the first week of the rest cure. Gastric sedatives are also of service here. The matter of artificial support is of secondary importance. Gastric supporters probably do not push up displaced organs, but such support gives relief from these feelings of sinking, emptiness, and exhaustion, which are among the most bitter complaints of patients, but these complaints are probably due to lessened intra-abdominal tension and a tendency to a pooling of the blood in the planchnic area when the erect position is assumed.

The best belt is a firm abdominal wall, and our efforts should be directed toward restoring its tone and to thickening it by the deposition of a substantial layer of subcutaneous and extraperitoneal fat. As regards the development of the abdominal muscles reliance must be placed upon massage and the practice of abdominal exercises. In regard to abdominal belts, the ideal one is yet to be invented. It must cause pressure from the lower part of the abdomen upwards and somewhat backwards. In the pendulous belly of stout subjects this is quite easy, but most patients with gastroptosis are thin, with prominent iliac bones, which tend to carry off the pressure from the hypogastric region, where we most wish to apply it. The problem is a purely mechanical one, and the use of a suitable pad helps to overcome it, but the results leave much to be desired. Three things should not be done: patients with gastroptosis should not be overdieted, their stomachs should not be washed out, and they should not be operated on.—British Medical Journal.

Gastro-Jejunal and Jejunal Ulceration Following Gastr-Enterostomy.

Wilkie, (Edinburgh Medical Journal,) describes three cases of this malady, two of gasto jejunal and one of the jejunal ulceration. The gastro-enterostomy was done in all three cases for cicatricial contraction of the pylorus. There was a recurrence of gastric symptoms, in one case a few weeks after the gastro-enterostomy, in the others two years after. These facts accord in many particulars with the observations of others upon jejunal ulcers after gastro enterostomy, which the author summarizes as follows:

1. Two types of jejunal ulceration must be distinguished, the one—gastrot jejunal—in which the ulceration occurs at the site of the anastomosis; the other—true jejunal ulceration—in which one or more ulcers form in the jejunum at some distance from the anastomotic opening.

2. In the great majority of cases the ulceration has occurred at or close to the gastro-jejunal anastomosis.

3. The ulceration may manifest itself at any period after the gastro-enterostomy operation, from a few weeks to several years.

4. The formation of the ulcer is usually associated with a recurrence of the gastric symptoms, but in some cases symptoms of perforation have been the first evidence of the ulceration.

5. The tendency to perforation is apparently greater than in the case of gastric ulcer, and the death rate from such perforation is high.

6. In all the recorded cases the preceding gastro-enterostomy has been carried out for the relief of a non-malignant affection of the stomach or duodenum. (Key has recorded one case as jejunal ulcer after gastro-enterostomy for gastric carcinoma, but the evidence is unconvincing.)

7. Jejunal ulceration has been met with after every variety of gastro-enterostomy, but it occurs probably more frequently after an en Y type of anastomosia than after the simpler forms of operation.

8. In the majority of cases the preceding gastric lesion had been associated with hyperacidity, but in not a few cases there had been no excess of free acid.

9. The jejunal ulceration is probably caused by the action of the acid gastric juice on the jejunal mucosa, which, under normal conditions, is exposed to an alkaline medium.

Symptom Complex of Scarlatina Vaccination.

Vladimiroff describes the effects of prophylactic injections of Gabritschewsky's scarlatina vaccine (a streptococcus bouillion culture heated to 60° C. and preserved with carbolic acid,) administered hypodermically in three doses of 0.3 to 1 c. c., at eight-day intervals. There results a rash strikingly resembling that of scarlet fever, lasting from three to four days, and spreading over the entire body in twelve hours. The strawberry tongue appears on the second day. Desquamation frequently succeeds the attack.—Archiv fur Kinderheilkunde.

Value of Radiography in the Treatment of Adenopathies.

P. Oudin and A. Zimmern says that in several forms of adenopathies the use of the x-rays causes diminution of the size of the glands. The method, when properly controlled by shields over the normal parts, is without danger, and the only unpleasant effect observed is pigmentation of the skin. Irradiation much less in strength than to cause skin burns will destroy lymphocytes. The rays diminish the size of the glands in inflammatory swelling of the glands in lymphatic leukemia, in cancer, and in tuberculosis, when treated early before caseation has occurred. Lymphosarcoma may be successfully treated with the rays. In tuberculosis of the glands we get first a parenchymatous reaction with proliferation of the gland follicles. Later the connective tissue elements undergo hypertrophy, followed by sclerotic action. Early tuberculosis offers a rich field to the treatment by the x rays; in the stage of suppuration if the pus be evacuated a cure may be obtained; in the stage of atropic sclerosis they have no other action. In chronic adenitis just below the skin the action is most remarkable. The glands soften gradually and finally entirely disappear. There is no reason to fear generalization of the disease as a result. The best method of treatment is by a series of short sittings. When atrophy is complete we should continue the sittings in order to prevent recurrence. The rays have an excellent effect on old fistulæ. —Gazette des Hopitaux.

Cold Abscesses.—Calve and Gauvian in The London Lancet, writes about the most rational therapy of cold abscesses. In the preantiseptic period many surgeons feared to intefere at all because of the danger of secondary infection. Later, on the basis of the so-called tuberculom therapy, radical extirpation was the rule. The dangers, however, were great and the orthopedic results poor. More recently, surgeons in Germany, England and America operate more conservatively, contenting themselves with curettement of the abscesses and closure of the wound, in the hope of obtaining primary union. The immediate results are good, but usually the abscess fills up again and often the wound becomes infected and a sinus results. The patient is then in an exceedingly unfortunate situation. In France, therefore, this method has been replaced by purely conservative treatment. The patients are sent to the country or to the seashore, vigorously nourished, and the affected portions of the body put at rest for a considerable period. This, sometimes, alone effects a cure; more often, however, it is necessary to aspirate the pus and to inject modifying fluids. The site of puncture should be as high as possible; if a dependent portion is chosen, a fistula may result. In withdrawing the trocar, the aspiration should slowly be continued. The vacuum so produced prevents pus exuding from the needle and eliminates the danger of infecting the site of puncture. Several successive aspirations are usually needed to bring about obliteration of the cavity. In unfavorable cases this does not take place and an iodoform emulsion must be injected. That used by the authors consists of iodoform 5.0, ether 10.0, guaiacol and creosote each 2.0, sterile olive oil 100.0. Immediately after injection the heat of the body volatilizes the ether and deposits the iodoform, as a fine dust, upon the walls of the cavity. Toxic manifestations rarely result after the injection of 10 20 c. c. of this fluid, except in cases of iodoform idiosyncrasy.

The results reported by the writers, are very favorable: 95-98 per cent of all cases were cured. In only 2-5 per cent. did fistula result. These almost always healed sooner or later, as a secondary infection could readily be avoided.

Diabetes.

Phosphoric acid preparations are believed by the author to be valuable in the treatment of diabetic cachexia. He makes use of the following combination: Phoshoric acid, 5 grams (75 grains); acid sodium phosphate, 10 grams (150 grains); distilled water, 300 grams (10 ounces); one tablespoonful to be taken in a glass of water at every meal. The treatment may have to be discontinued if the digestion is disturbed. It is contraindicated by albuminuria and nephritis. Cautru Journal de medicine de Paris.

Buttermilk in Typhoid.

Buttermilk, especially when prepared with the B. Bulgaricus, is both nurishing and medicinal; it should be preferable to sweet milk in typhoid, because the latter is an excellent culture medium for the bacillus.—Exchange.

Styptic Properties of Bromides and Chlorides.

R. van den Velden, in examination of the blood after the administration of halogen salts as presumable hemostyptics, finds increase of coagulabilty from Na Cl, whether given by mouth, subcutaneously or intravenously. This effect is not obtainable by the addition to blood in vitro of the saline solution. The bromides are like the chlorides in those reactions. The action of the halogen is to be considered as the result of an alteration in the degree of concentration of the blood. The condition develops not alone from a pouring out of water into the gut. Of greater import is hydremia, for, with the water from the tissues thrombokinase passes over into the blood. Because of these data, the old-fashioned salt therapy (Nace) is shown to have an experimental basis. The probably best administration is the intravenous. In 60 cases where it was employed in humans, there were no injurious consequences nor any "salt fever." The patients were all adults. Ten to thirty grains of common salt, per os, easily developed symptoms of irritation.—Zeitschrift f. exp. Path. u. Therapie.

The Kentucky State Medical Association.

The fifty-fifth annual meeting of this association was held in Lexinton on Tues-Wednesday ond Thursday, September 25th, 26th and 27th, under the presidency of Dr. I. A: Sherloy, of Winchester. Officers for the ensuing year were elected as follows: President, J. G. Carpenter, of Sanford; first vice-prefident, Dr. J. W. Pryor, of Lexington; second vice-president, Dr. B. E. Giannihi, of Coalmont; third vice-president, Dr. G. E. Hancock, of Henderson; secretary, Dr A. T. McCormick, of Bowling Green; treasurer, Dr. W. B. McClure, of Lexington. The next meeting of the association will be held in Paducah, October, 1911.

Alcoholic Applications in Typhoid Fever

Cheinisse (Sem. med.) advocates strongly, as an alternative to cold bathing in typhoid fever, the application of alcohol to the abdoman. He applies a compress, consisting of a quadruple fold of absorbent cotton wool, wrung out of alcohol sufficiently to prevent dripping. Over this he places a second compress of cold water, in order to weaken the alcshol a little, and so prevent irritation of the skin, the whole being covered by an impervious bandage. The water compress should be changed every hour, but the one containing alcohol may may be allowed to remain double that time. It may be necessary to lubricate the skin with a little lanoline, if irritation should occur, but such incouveniences have not been found to intervene with any degree of frequency. This treatment has been followed in twelve cases of enteric fever, and although the number is not great, the cases themselves were of considerable severity, and no untoward results were experienced. It has been particularly valuable in the case of children, where the tendency to heart weakness renders cold bathing dangerous, and the author recommends that his treatment should be invariably preferred in such cases.—Brit. Med. Jour.

Brain Abscesses of Nasal Origin.

Donalies, (Arch. f. Obrench.) reports the case of a boy twelve who, as the result of a fall on to his forehead, developed a swelling above the root of the nose. Suffering from pain in the head, and with a hæmorrhagic nasal discharge which appeared to come from under the middle turbinated bones of both sides, he was admitted to hospital with a temperature of 102° F. The forehead swelling was opened and found to contain pus, which was also present in both frontal sinuses. A week later left-sided convulsions were noticed, and the right side of the brain was explored, but without result. On the left side, however, were found a small brain abscess and a larger subdural one, both of which were evacuated. The child subsequently made a satisfactory recovery.

The Small Cystic Ovary.

Forgue and Massabuau state that the cardinal symptoms attributed to the microeystic ovary are pain, hemorrhage and general nervous symptoms. Many sclerocystic ovaries do not cause pain. Others are accompanied by inflammatory symptoms due to pelvic peritonitis and adhesions, and it is the removal of these ovaries that brings relief of the pain. There are also small, free ovaries that are very painful, and their removal brings with it little relief. Hemorrhage seems to be caused much more frequently than pain by the sclerocystic ovary.—Revue de Gynecologie.

Tuberculous Cavities in a Nursling of Three Months.

Collet and Delachanal detail the history of an infant of three months of age, who

had a healthy mother, but a tuberculous father, which died of miliary tuberculosis with meningitis, and in whom there were found post mortem two cavities in the right lung which were entirely independent of the bronichial glands. The child died with the symptoms of an acute pulmonary trouble, with intense dyspnea, cough and vomiting. The bronchial glands on the right side were caseous. There were no ulcerations in the intestine, which the author takes to mean that the tuberculosis was not from dringing tubercular material, but came by inhalation. The cavity seemed to have been formed by a rapid pneumonic process, not by a slow fibrocaseous one.—Lyon Medical.

Study of a Family of Heredosphilitics.

Barre and Gastel present a study of a family of heredosyphilitics, which has much of interest in it. The disease is manifested in one of the family very lightly, and only the comparison of the history of the other members would have caused the diagnosis to be made in him. In the mother there was only presumptive evidence of syphilis, from the existence of general paralysis. The father was undoubtedly syphilitic. She was pregnant eight times, the first with a child that died at birth. All the other pregnancies gave normal births. The different degrees of infection, each child showing it in some way, are explained by the bilaterality of the infection and the entire absence of treatment in all cases. Tuberculosis was present in two of the children and the father. To the effect of this taint may be added the extreme poverty of the family. The stigmata were mostly ocular and nervous. One child at the age of eighteen had nervous, otitic, palatine, and ocular manifestations of heredosyphilis. He entered the hospital for meningitis, the other affections not having seemed to merit treatment. All symptoms disappeared under mercurial treatment. In two members of the family only ocular manifestations and in one only very slight ones were shown. The reaction of Wassermann was positive in every member of the family with the blood serum and with the cerebrospinal fluid. Lymphocytosis was positive in only two members of the family. It was the laboratory reactions alone that permitted of a diagnosis of syphilis in one of these patients, in whom the clinical manifestations were almost negative. This shows the value of these reactions in diagnosis.—La Presse Medicale.

A Case of Rheumatic Arthritis Followed by Streptococcus Invasion.

Strong, in the London Medical Local, reports the case of a girl 21 years of age, who gave a history of an attack of tonsilitis and other symptoms which indicated that she was suffering from an attack of acute rheumatism, but against this was set a history of pain in the soles of the feet and lumbar fascia, the absence of cardiac signe and a characteristic appearance of the left wrist, which suggested gonococcic arthritis. Examination of fluid aspirated from the wrist and of a swab from the vagina failed to show the presence of the gonococci. During the course of her illness the reaction of the salicylates left no doubt but that the case was one of acute rheumatism. Seventeen days after her admition to the hospital her temperature suddenly rose to 104°, and she complained of sore throat, and a faint erythematous rash appeared on her chest and abdomen. Scarlet fever was suspected. A swab taken from her throat yielded streptococci and straphylococci. The urine was found to contain casts and much free blood and leucocytes. She now has a systolic murmur at the apex. Her condition immediately became grave, and she died four days after the onset of these symptoms. The appearance at the autopsy were those of an intense septicemia and pneumonia. Death had occurred from toxemia. The pus from the pleura contained many streptococci. Sections of the lungs showed appearance of intense inflammation but not just of pneumonia. The kidneys were enlarged, engorged, and bled on section. The points of interest in this case are: In the first place, was the illness of which the patient died a streptococci infection or a very severe attack of scarlet fever? A streptococcuc being frequently found in association with this disease is believed by some to be the actual cause of it. Where is the line to be drawn between scarlatina and streptococcic septicemia? Secondly, was the fatal illness a new infection or merely a relapse in the course of the disease from which the patient was suffering when admitted? The writer was inclined to the former view. Another point of interest was the pneumonia which was evidently only a part of the general infection.

Diagnosis and Role of Gravidic Decalcification.

Marquiz (L'obstet) believes osteomalacia is an exceptional affection. There occurs in every pregnant woman a primary degree of decalcification which is normal. Painful relaxation of the articulations is abnormal. A later phase is the cachectic one. Decalcification is accompanied by increased elimination of calcium in the urine, and castration lessens this, coincident with which the pains diminish, and the general

condition improves. The theories of the production of osteomalaeia are, first, a disappearance of the power of recalciffcation and a consumption of calcium from the bones which is increased by pregnancy; second, that the trouble is not so much one of assimilation as one of perversion of the disassimilation, the calcium being normally excreted from the bones, with hyperelimination in the urine and feces and decalcification. Decalcification has as a determining cause ovarain, suprarenal, or other disturbance, the predisposing causes being too frequent pregnancies, and poverty of food.

The Serum Diagnosis of Hydatid Disease Fixation of the Complement.

Eckenstein in the London Local says that all observers report that the method of fixation of the complement is an exceedingly valuable method of diagnosis for echinococcus disease. In his hands the reaction was positive in six out of seven undoubted cases. The reaction is never positive in cases which are not echinococcus, so that a positive reaction is of more value than a negative one. There are different methods of preparing the antigen; the author employed the fluid obtained from an echinococcus in a sheep.

Non-Surgical Treatment of Prostatic Hypertrophy.

Hirt (Berliner Klin. Wocheusch) advocates in acute urinary retention the use of silk or partly silk catheters having the Mercier curve. If these fail to pass, metal catheiers with the ordinary curve may be tried, but are seldom needed. In case catheterization fails, the bladder should be punctured with a medium sized trochar and a catheter inserted and left in place. In the presence of hematuria styptics should be prescribed, a catheter inserted, and hot or cold irrigation with boric acid, silver nitrate, or gelatin made. In cases attended with vesical irritation and frequent urination, sounds should be introduced, at first thin elastic and then thick metal. If this treatment is not well tolerated, hot sitz baths, hot enemata and regulation of the diet should be ordered. If there is incomplete or complete chronic retention, systematic catheterization in connection with vesical irrigation once or more daily is indicated, or permanent insertion of the cathetor. In seventy-five cases this conservative treatment was carried out in thirty, with improvement of the condition. A cure, of course, cannot be expected.

Treatment of Injuries of the Hand with Tincture of Iodine.—Reclu (Bul. de l'Acad., de Med.) treats wounds of the hands, by painting them, as well as the surrounding skin, with tincture of iodine, and then after evaporation of the alcohol, applying a dry aseptic compess and a layer of cotton and bandage. The dressing is renewed in the evening of the first day, and later at increasing intervals, so that the wound is handled every three or four days. The iodine application should not be preceded by cleansing, which servs to spread infection and also impairs the effect of the iodine. If the patient's hand has already been washed before the surgeon sees the case, the wound should be thorougly dried with pledgets of gauze and the iodine then applied. Only freshly prepared tincture of iodine should be employed, at least no older than a week. The result is a rapid cicatrization of the wound, so that the patient is soon enabled to resume work.

Roentgen Rays in the Treatment of Uterine Hemorrhage and Myomata.—Kronig and Gauss (Munch. med. Woch.) that the use of the X-rays has a marked influence on the bleeding of myomata uteri and at the same time reduces them in size. Out of 568 cases of myoma uteri seen at the Freiberg Hospital, 505 were operated on, and sixty-three treated with X-rays. Removal of the entire uterus was done in 475 cases, and in twenty-two the fibroid was enucleated. In comparing the use of the rays with operation we must consider the mortality and the length of treatment required. The mortality of operations for fibroids is 3 to 5 per cent. They have made use of the rays only when there was heart weakness or extreme anemia which would contraindicate operation. In general, the first menstruation after the use of the rays is more profuse than usual, hence we must not make use of this treatment in much exsanguinated patients. The average duration of the sojourn of patients in hospital after operation was seventeen days, while a complete cure by the rays usually requires several months. Meanwhile the patient is able to attend to her household affairs as well as or better than before. It is necessary at times to leave intervals of two weeks or so between applications of the rays. in order to prevent skin burning or erythema. For these reasons the authors operate on the majority of their myoma cases, since the treatment results more quickly and with less expense in a definite cure. Since the ovaries have been left in place the bad effects of complete castration have not been noted, and the menopause neurosis have been less evident. The effect of the rays is to diminish ovarian secretion, and the menopause come on, but less rapidly than when both overies are removed.

Chronic constipation is improved and necrosis and suppuration of the myomata have not been observed. Whenever operation would endanger the life of the patient on account of extreame hemorrhage, heart weakness, great obesity, bronchial catarrh, or other symptom, the X-rays should be used instead. The mortality under their use is 4 to 6 per cent.

Treatment of Cicatricial Stenosis of the Uterus of Therapeutic Origin.—Mauclair and Burnier (Arch. gen. de chir.) say that the use of caustics, liquid or solid, or the actual cautery has produced many cases of cicatricial stenosis of the cervix uteri. Formerly it was customary to use the silver nitrate stick or zinc chloride as an intrauterine application, repeating this as soon as the first slough had separated. This resulted in stenosis, sometimes partial, sometimes complete. If complete, menstruation became impossible and hematoclpos, resulted. If partial, the flow was painful, altered in character, and irregular. Uteri have been found which have undergone complete atrophy on account of such use of caustics. Sterilty was the result. In some cases pregnancy occurred and the cervix was undilatable. The results of such a condition might be rupture of the uterus followed by infection, ante or postpartum. In none-pregnant cases hematosalpinx, pelvioperitonotis, pelvic hematocele, and pyometra have resulted. The prognosis of such a condition is bad. Such a uterus may become infected at any time. Every minstruation is painful, and the patient becomes a fretful invalid with an entirely changed disposition. The treatment of such a condition to be at all effectual must be operative, and a number of procedures have been devised by which functional power of the cervical canal may be restored. The authors give histories of twenty-three cases.

Cold Douches to the Neck and Rhinitis.

Muck observed when cold water is is poured or douched on the back of the neck that a stopped up nose becomes "permeable" to the air. The blood vessels of the nasal mucous membrane are reflexly contracted. The author therefore employs cold douches to the back of the neck in rhinitis. In acute inflammations of the mucousa, especially in coryza, one can by this means remedy the stopped-up condition of the nose, and thus allow the escape of the secretions. The author further believes that owing to the proximity of the vasomotor and respiratory centers in the medulla these douches also act beneficially in bronichial asthma, especially of nasal origin.—Munch. Med. Wochenschrift.

Hot Baths in Superficial Inflammation.

Richter reports his success with the old hot-bath treatment. He treated 330 workingmen with various injuries of the soft parts, felons, furuncles and phlegmons with the systematic use of local hot baths. The writer orders the patient to put the hand, arm, foot or leg into the water as hot as can be borne and to keep it in for from half an hour to an hour, pouring in hot water from time to time to keep up the temperature. This to be repeated several times a day. A little soda, about half a tablespoonful to a quart of water, is added. He believes that the principle of this treatment is about the same as that of the Bier method, attracting the blood more actively to the part to aid in combating the local infection. The results have been extremely satisfactory. Pus was evacuated by the incision at the proper time.—Munch Med. Wochenscrift.

Indications for Venesection.

Tabora states that whenever a venesection is contemplated, one should be assured that the pressure in the veins and consequently in the right auricle is really high. This can be done by means of a special instrument, the phleboto iometer. Venesection, as well as its non-bloody substitute, the tying-off of the extremities, will usually cause considerable relief when the venous pressure is abnormally high, but only if a sufficient amount (300 to 500 Cc.) of blood is withdrawn. It is especially indicated in severe cases of cardiac decompensation in combination with digitalis. In pneumonia there is usually no increased venous pressure, but the cardiac decompensation is due to vasomotor paralysis. Should actual heart weakness with high pressure be present, a venesection will do good.—Muench. Med. Woch.

Foreign Bodies in Hernial Sacs as Cause of Severe Complications.—Fabian (Munch. Med. Wochensch) records the fact that foreign bodies in the intestine are particularly liable to prove dangerous in persons affected with hernia. The writer mentions his experience in the clinic of Garre the case of a child seventeen months old suffering with strangulated hernia in which operation disclosed a tear in the lower portion of the ileum, due to the presence of a plum stone. Another case was observed in the same clinic a year ago, the patient being a child two years old, with rectovaginal fistula. Seven days after a plastic operation the wound reopened, and examination showed that two plum pits had become wedged in the anus and caused intestinal obstruction. In the literature thirty-

five cases have been reported in which foreigh bodies have been found in hernial sacs, most of them being inguinal hernias, and only two umbilical. The first symptom was usually the irreducibility of the hernia. He says that it has been pointed out that ordinarily the condition is not one of true incarceration, but a localized peritonitis. If intestinal perforation occurs, this is followed by phlegmonous inflammation or fecal abscess. Ordinarily the site of the perforation was in the lower portion of the small intestine, the cecum or ascending colon. Peritonitis has rarely occurred owing to the rapid formation of adhesions. The results of operative treatment have been very favorable. Immediate surgical intervention is indicated in all these cases, consisting in herniotomy, intestinal resection, or, if perforation has taken place, in intestinal suture. All attempts at taxis should be interdicted.

Naevus, Light and Radium in the Treatment of

Forty patients were treated with the mercury quartz lamp or with radium, or by a combination of the two. The number of cases unbenefited was very small and indicates that the treatment under consideration is a distinct improvement over the X-ray method, which the author states he has never observed to be productive of lasting benefit. In the presence of large reddish or purple nævi, if they are superficial and chiefly the result of dilatation of the capillaries with but slight involvement of the arterioles, the use of the quartz lamp is indicated. Small red arterial nævi, on the other hand, respond better to the radium treatment, since its effect is exerted more deeply than that of the lamp. Mixed nævi of moderate size, which constitute the larger number of cases, should receive simultaneous treatment by both methods. The author never gives more than four or five exposures with the lamp, nor more than two or three with the radium. The time of application never exceeds one hour. The lamp, indeed, gradually loses its effect, often causing a deposion of pigments which obstruct the rays of light. The same is true of radium which, when too often applied, results in a chronic dermatitis with telangiectatic dilatations. Even in the most favorable cases the skin becomes quite normal only at certain points in the lesion; in other areas it appears whitish and atrophic. Kromayer in Deutsche medizinische Wochenschrift.

Primary Epithelioma of the Urethra.

Tanton says that this tumor is extremely rare. Its etiology is obscure Predisposition and chronic irritation play a part in it. Symptoms are at first slight; they are a diminution of the stream of urine, spontaneous hematuria, purulent secretion, tumor in various parts of the urethral passage. It appears in old subjects with the manifestations of urethral stricture. It destroys the tissues and infiltrates the neighboring structures. It may cause a perineal phlegmon or abcess after the uretha has been opened by the growth. In females it causes the same symptoms, and there is a tendency to confound the symptoms with those of metrorrhagia. Spontaneous pain is severe and violent, irradiating down the thighs. Coitus becomes very painful. In the females the growth begins at the opening of the meatus. The diagnosis is not easy. The prognosis is unreservedly bad. Treatment is of no avail as far as removal of the entire growth. Only palliative operations can be undertaken.—Gazette des Hopitaux.

The Etiology of Hodgkins Disease and Lymphatic Leukemia.

Frankel and Much (Muench. med. Woch ,) present the following conclusions:

1. The affection designated as Hodgkins disease or lymphomatosis granulomatosa is to be regarded as an infectious disease caused by an antiformin-fast, Gram negative, granular rod, which, in the authors experience, is only exceptionally associated with genuine tuberulosis. The micro-organism found in this affection is closely related to the tubercle bacillus. The views of Sternberg find support in the etiologic studies of the authors.

2. Lymphatic leukemia, according to their findings, is likewise probably also to be classed with the infectious diseases, which are caused by an antiformin-fast bacillus.

Games for Children and their Influence in Hygiene.

Delobel (Ann. de med. et chir. infant,) says that games are of importance to the health of children. They aid in the development of the body and of the intelligence; they increase the imagination; they employ the energy of the child. They give an outlet to the nervous energies. The joy of living and defending himself are necessary and valuable to the child. Calling out is the best form of respiratory gymnastics. Games must please the child, for pleasure is the principal necessity, the excitant of vital energy. Games and dances develop flexibility, agility, and harmonious use of the muscles. They aid in developing the maternal and domestic sense. Such games are superior to set gymnastic exercises.

A Case of Audible Tinnitus.

Tilley reports the case of a girl age 13, who sought advice for a "purring" noise in her right ear, which she had noticed for at least two years, but which had become louder during the past twelve months after an attack of "inflenza." Hearing in both ears was normal, and no pathological conditions were to be seen in the meatus nor in the nasopharynx. The general health was excellent. She has menstruated once—about four months ago—but this seems to have exerted no influence for good or evil upon the aural symptom. Listening through the otoscope, it was noted that: (1) The "purring" sound—very like a hemic murmur—was best heard when the head was erect, and it was synchronous with the pulse. (2) It was diminished by either very light pressure over the right carotid artery, or by much firmer pressure on the left. Tilting the head toward the left shoulder had also a similar effect. The pulsating murmur could be heard in a quiet room if the observers ear was placed closed to the patients right ear, and was just perceptible if a stethoscope was applied to the temporal bone above the pinna.—Proceedlngs of the Royal Society of Medicine.

The Pathotogy of Suicide.

Bartel (Wiener Klinische Wochenschrift) says that there is a close association between suicide and the status lymphaticus. The writers attention was drawn to the matter by observing this condition in three autopsies he carried out on suicides. The subjects were a young man aged eighteen and two young girls aged nineteen and twenty-one. All had enjoyed apparently good health, and in each case there were well-marked signs of lymphatism, including considerable hypertrophy of the thymus gland. A further study of the subject is based upon 122 autopsies of suicide, of which sixty-seven were male and fifty-five female. The most constant anomalies were relative to an exaggerated development of the thymus and the lymphatic systems, and this was especially marked in the young subjects, so that in the majority of cases in this category there was present an actual status lymphaticus. Other points noted were a deficiency in the development of the arterial system in proportion to the size of the individual, and a frequent colloid degenerations of the thyroid gland. The ovaries were almost always large and usual showed the presence of numerous follicular cysts. Anomalies in development were also common.

Treatment of Non-Perforlaing Duodenal Ulcers.

Zum Busch (Munch. Med. Wochensch,) believes that these cases, if recognized early should be treated conservatively, but if, as so often happens, a recurrence takes place, resort should be had to operation. Of fourteen cases operated on, thirteen survived the operation. One died in the fourth week of septic pneumonia with empyema. Another patient, who suffered both from gastric and duodenal ulcers, remained healthy for over five years, and then succumbed to gastric cancer, although the duodenal ulcer had completely healed. A third patient had to be operated on twice consecutively for ulcer of the jejunum, while a fourth was later laparotomized by another surgeon, who, however found nothing pathological in the abdominal cavity. The operation of choice in the authors opinion is gastroenterostomy. If the ulcers can be closed by suxture this should be done, but they should not be excised unless under special circumstances. The after treatment is of great importance.

Spontaneous Lacerative of the Long Extensor Tendon of the Thumb.

Dr. zur Verth (Deut. Ztsch. f. Chr.,) states these injuries are apt to arise from comparatively slight force, so it is probably that there is an antecedent condition of chronic inflammation which favors the rupture. Such spontaneous ruptures are found particularly in persons whose work subjects the tendon to special strain, such as waiters, wood-carvers, drummers, etc. His cases comprised two waiters and one wood-carver. Owing to a previous trauma there may be a condition of weakness and a tendency to tendosynovitis, so that little force is required to tear the tendon. The site of rupture is usually the place where the tendon emerges from the doral ligament and then turns at an acute angle in the direction of the thumb.

Suprarenal Capsules in Pregnancy and the Puerperium.

Sambalino (Ann. di ostet. e gin.,) has made histological examinations of the suprarenal capsules in twenty-six cases of pregnancy. Three women died of hemorrnage alone; ten had eclampsia and albuminuria; four, chronic nephritis; four, sepsis, and five, various complications. The writer is in doubt whether the changes observed were due to pregnancy or to the other pathological conditions present. He states, after careful consideration, that pregnancy alone causes a hyperplasia of the cortical substance of the suprarenal

capsules apart from any pathological condition, but that there is no evidence of changes in the medullary substance. In pregnancy complicated with nephritis and eclampsia there are changes also causing suprarenal adenomatosis; in infections, especially when prolonged and severe inflammatory conditions have been present, there is a small-celled infiltration of the fasciculated zone of the medullary substance, even resulting in connective tissue proliferation. In normal cases there are vacuolization of the elements of the cortical zone and pigmentation of the reticulated zone.

Gangrenous Perforation of the Uterus after Abortion.

Freux (Ann. de gyn., et d'obst.) says that there are cases of gangrenous perforation of the uterus after abortion that are not the result of attempts at criminal abortion by the use of instruments. To support these statements the author gives the history of a case seen by himself in which the patient induced an abortion on herself by the use of a short syringe nozzle introduced into the cervix, through which dirty water was injected into the uterus. The result was speedy death from retained membranes and decidual material, accompanied by gangrenous perforation. Examination of the uterus postmortem showed that the perforation was on the anterior wall in a location which could not have been reached by the syringe nozzle. Cases described by other authors have also shown the perforation on the anterior wall. He believes that the perforation was due to placental putrefaction, with formation of a slough in the same location where the uterine wall is thinned by the growth of the villi interlacing with those of the placenta. From a medico-legal standpoint, it is not wise to express an opinion of criminality in cases of perforation after abortion. Perforations have been found in women in whom there was no question of the use of instruments to induce abortion. In these cases two things co-exist, infection and partial retention of the placenta, which putrefies and propagates infection to the uterine wall.

Mercuric Chloride Injections in Puerperal Infection.

Barsony, (L'Obstetrique) says that in well-established puerperal infection the author injects intravenously 0.005 gramme ($\frac{1}{12}$ grain) mercuric chloride, repeating the injection later in the day if the temperature keeps up. Should signs of intoxication present themselves, the injections are suspended, and resumed with a smaller dose as soon as these symptoms have subsided. Infected individuals can tolerate larger doses of the per-chloride than can the healthy organism. The number of red corpuscles increases in normal and febrile pregnant women under the influence of the injections. So satisfactory have been the results that he proposes in future to make a prophylactic injection of 0.002 gramme ($\frac{1}{30}$ grain) in all parturient patients, using a slightly larger dose before major operations.

Fractures of the Sesamoid Bones of the Thumb And Big Toe.—Morian (Deut. Ztsch. f. Chir.,) calls attention to direct and indirect fractures of these bones, both transvers and longitudinal. These fractures are by far most frequent in the sesamoid bones of the big toe. Their diagnosis cannot be made without the x-ray. Direct isolated fracture may be observed in the thumb, but in the toe it is usually accompanied by fracture of one or more of the metatarsals. Healing usually takes place even under expectant treatment, although now and then, if a fragment becomes impacted between the articular surfaces, its removal may be necessary.

The Sacral Route for Removal of High-seated Rectal Cancers.—In cases where a carcinoma is situated high up states that in the rectum or in the sigmoid flexure, Kuttner (Deut. Med. Wochensch.) he recommends the sacral route of operation on account of its simplicity and slight mortality. By its use the affected portion of bowel can be freely drawn out into the sacral wound before opening the lumen, an artificial anus established, and excision later performed. In the case of patients much reduced in health, a second operation may be postponed, or, if necessary, entirely omitted. This method of operation is adapted even for the most unfavorable cases.

Bismuth Paste Treatment of Fistula.—Elbe (Deut. Med. Wochensch.,) does not believe this treatment as applicable to general practice, and as only adapted for hospitals where the patient can be kept under accurate observation and where in case of bismuth poisoning the paste can be removed at once. The writer is not favorably impressed with the value of the method and has seen it fail even when Beck's technic was closely followed. The use of bismuth carbonate is recommended as being less dangerous.

Extirpation of The Shoulder Blade.—Kavamura (Deut. Zeitschrift f. Chir.,) Mentions 494 cases of excision of the scapula, comprising 52 of sub-total and 127 of total removal, and 315 in which the arm and clavicle were simultaneously removed.

The majority of the patients were males and the chief indication was sarcoma. Since 1875 the mortality of the operation has greatly decreased, and is almost nil in cases treated since 1901. Of 312 cases operated on for new growths there were 87 definite cures. Regeneration of the scapula takes place only in cases in which the subperiosteal method is employed.

Treatment of Vincent's Angina.—Rolleston (British Jour. Children's Diseases,) discusses various points in connection with Vincent's angina, based on 32 cases that have come under his charge. For treatment its author thinks in most cases it is sufficient to swab the affected part morning and evening with undiluted tincture of iodine. If the fœtor is excessively penetrating the throat may be syringed with a solution of potassium chlorate and myrrh. In one case where the ulceration advanced in spite of these measures, the application on two successive days of powdered methylene blue to the ulcers was followed by rapidly healing. Internal medication is usually unnecessary.

Rare Forms of Congenital Hydrocephalus.

Joukovsky (Ann. de med. et chir. inf.) mentions the forms of hydrocephalus in which, with an increase in the amount of ceredrospinal fluid, there is not an increase in the size of the head. Instead there takes place a compression of the brain in which the cerebrum becomes atrophied. These infants die soon after birth. Illustrative cases are given by the writer. Such hydrocephalus has developed rapidly after traumatism at the time of birth. Again it may occur from cerebral hemorrhage and obstruction of the aquedúct of Sylvious by a clot. One such case occurred in a patient who had asiatic cholera while pregnant, and was five weeks in a hospital. Her general weakness lasted for a long iime. Her child was somnolent almost from birth, did not cry, and took little milk. It became weaker and more sleepy until death from atrepsia when one month old. There was fulness of the fontanels. The cranial cavity was found empty except of fluid, and a few remains of the brain substance.

The Treatment of Gonorrhea by Means of the Lactic Acid Bacillus.

Watson, in the British Medical Journal, says that it is well known that Doederlein's acid-forming bacillus protects the vagina against other infections. This led the writer to the thought that the lactic acid bacillus might possess a similar power. The author used filtered sour milk, which is very rich in these bacilli, sometimes adding to it a milk sugar and powdered lactic acid bacilli tablets. After the genitalia have been carefully cleansed, without, however, using any antiseptics, the milk so prepared is injected. At first the discharge is increased in amouut, but becoming pale and watery. Thereupon a steady improvement sets in. mild cases being cured in five or six days, more obstinate cases in two or three weeks. The writer has used the method on only two cases of male gonorrhea, in both, however, with good results.

Ectopic Gastation in Australia.

The Australasian Medical Gazette mentions two papers by Craig, who practiced in Sidney for fourteen years before he became a consultant. He met with as many as 109 cases during that time. a number of which seems astounding for a general practice, however extensive. The writer's explanation of this frequency is that pelvic inflammation, the result of miscarriages or venereal disesse, is very common in the industrial centre where he lived. The chief point of interest in his community is the stress which he lays upon a sign which he has never yet failed to elicit, except in some of the patients who had a simple hæmatocelè only. This is a tenderness of the cervix, caused especially by putting one finger on the external os and slowly lifting the uterus upward and to either side, so as to produce tension on the broad ligaments. In one patient he noticed a spasm of pain crossing the face as he did this, though the woman was so nearly dead of hemorrhage as to be comatose and quite unconscious; a timely operation saved her.

Carcinoma of the Aesophogus.

Moorhead, at a recent meeting of the Royal Academy of Medicine (Dublin Medical Journal), exhibited a specimen of carcinoma of the œsophagus removed from a female patient who had come into the hospital in August last compiaining of difficulty in swallowing. He passed a bougie and found obstruction fifteen inches from the teeth. It was noticeable that the second sound in deglutition was absent or delayed. In a screen examination they saw a bismuth mass lodged in the œsophagus above the cardiac end. Shortly afterwards swallowing became almost impossible, and Mr. Stoney performed an operation which, unboubtedly, prolonged the patient's life. On post mortem examination the pleura on the left side was adherant, and all the abdominal viscera were adherent for no apparent reason. The œsophugus was, as had beeu expected, considerably distended. In the lower end of the œsophagus there was an

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accumulation of stones of grapes which the patient had eaten during the last few days of life. The carcinoma was the usual type. The specimen demonstrated to valvular form of opening which Stoney had effected.

Acute Visceral Syphilis.

Bushby (Liverpool Medico-Chirurgical Journal) records the following case: A single man, aged 28, was admitted to the Liverpool Northern Hospital complaining of a sore throat, difficulty of swallowing, pain in the chest and dyspnœ, greatly aggravated by slight exertion. His illness had commenced three weeks previously with rigor, followed by a severe pain on the left side of the chest and difficulty in breathing. He had, however, suffered from sore throat for eighteen months previously. He had been a healthy man until he contracted syphilis three years before admission to the hospital, and had been insufficiently treated owing to his own neglect. He had always been temperate, so far as alcohol was concerned, and had had no rheumatic fever. On admission he was found to have extreme sloughing of the soft palate and posterior pharyingeal wall. There were several cicatrices of old ulcers above the roof. Examination of chest showed the heart apex beat in the fifth intercostal space just outside the nipple line. A systolic thrill was felt on the second right intercostal space close to the sternum. An area of dullness, compounded of the cardiac, right pleural and hepatic areas, of somewhat peculiar shape was mapped out. Some pericardeal friction was heard along the left costal margin. The first sound of the heart at the apex was indistinct, and accompanied by a soft systolic bruit, not conducted to the axilla nor heard in the back. Over the aortic area there was a soft but distinct systolic bruit. The second sound was barely audible; the existence of a diastolic bruit was doubtful. The upper level of pleural dulness passed outwards from above the nipple and in the back was at a level of the six dorsal spine. There were also slight enlargement of the liver and spleen, and some free fluid in the peritoneal cavity. Sixteen ounces of clear fluid were withdrawn from the pleura, and the patient was placed on anti-syphilitic treatment with the result that he has improved steadily in general health though his cardiac lesion remains. The author concluded that syphilis was the cause of trouble, and that the probable explanation of his condition was a mediastinitis as the primary leison, and that this gave rise to pericarditis and right pleural effusion, and that interference with the return of blood to the right side of the heart caused by the cyanosis of the face, the congested liver, enlarged spleen and slight ascites. In addition to these there was evidence of active endocarditis, and the subsequent progress of the case induced the writer to believe that the patient had also combined aocrtitis and valvulitis, causing some aortic stenosis, rather than any cicatricial process involving the aota. Examination with the X-rays showed the absence of any aneurism or of any cicatrical mass surrounding the origin of the aorta.

Four Cases of Acute Non-Suppurative Encephalitis.

Marsh (British Journal of Children's Diseases) concludes that if any disease beginning acutely with fever, cerebral irritation and rapidly developing foecal symptoms, the possibility of acute encephalitis should be borne in mind, and if after acute stage has passed off, the symptoms of cerebral palsy persist, the diagnosis is practically confirmed. The first case was a boy, aged 4 years. About a week after an attack of mumps, he suddenly became stubborn and irritable, and developed a staring and vacant look, and on getting him out of bed it was noticed that he walked with a staggering gait. Three months later his gate was ataxic; his muscles were flaccid, and his knee-Jerk could not be obtained. Two months later he was much better, but still staggered on walking. He subsequently made a complete recovery. This case is similar to those described by F. E. Batten, under the title of "Acute Ataxia in Children." The second case was a girl, aged 4 years. She took ill suddenly with fever and a cough. There was a history of a fall on the head a week before. After a few days in bed it was found she could not walk or stand, and she had tremors of the arms and legs. Three weeks later she was very irritable, and lay in a crouched attitude; there were course nystagmic movements of the eyes; marked tremors, increased by muscular effort of the arms, hands and lower extremities. The gait was staggering with a tendency to fall forwards, similar to that seen in paralysis agitans, and she was unable to stand or walk without assistance. There was also general hypotonicity of the muscles. She gradually improvad, and at the end of ten weeks was quite well. This case corresponds to those described by Gorden Holmes, which were associated with destructive lesions in the cerebello rubrospinal system.

The third case was a boy of 6 years. On the fourth day of an attack of measles, vomiting set in, and lasted two days, after which he lost the use of his arms and legs.

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He could not speak or open his eyes, and for a week lay in an unconscious condition. At the end of that time he regained consciousness and seemed to recognize his parents, but was still unable to speak or move any of his limbs. Four weeks later he was still unable to sit up, or even lift his head from the pillow. He was unable to speak, but seemed to understand what was said to him. There was inco ordination of limbs, flaccidity of the muscles, and an absence of knee-jerk. There was anæsthesia of the legs and arms to pin-pricks. The gait was ataxic, with a teudency to fall backwards, and there was incontinence of urine and fœces. He improved gradually, and six months later, except for some ataxia and flaccidity of the muscles, was quite right. In this case there was probably a wide spread enphatitis involving the cerebellum, mesencephalon and the frontal area.

The fourth case was a girl, aged 8 years. When five years old she fell off a chair on the back of her head. She was unconscious for two days, and ill for fourteen weeks. Subsequently tremulous movemrnts of the right arm and leg were noticed. On examination, she presented marked inattention tremor of the right arm and leg, and the same in a less degree on the left side and in the head. There was lateral nystagmus and "scanning" speech. The condition remained constant, neither improving or getting worse. This case presents the clinical picture of disseminated sclerosis, but seeing the sudden onset and the stationary character of the symptoms, it is more reasonable to suppose it to be one of disseminated encephalitis with subsequent patches of sclerosis.

Iodoform and Thyroidism.

Short (Bristol Medico-Chir. Jour.) establishes the following conclusions: (1) That iodoform, when absorbed into the system, either from a wound or from the bowels, is excreted into the blood by the thyroid gland as iodothyrin, which is the active principle of the colloid of that gland; (2) That an excessive quantity will produce symptoms of acute thyroid intoxication; (3) That in the susceptible person iodoform may precipitate an attack of chronic thyroid intoxication, namely, exophthalmic goitre. The doctor shows that the constitutional symptoms of iodoform poisoning are due to acute thyroidism, being identical with those of this condition, and he cites a case in which Graves' disease was induced by dressing a carbuncle with the drug. The author recommends caution in its use as a dressing, especially where there is any reason to suspect a tendency to exyphthalmic goitre.

Acute Purulent Arthritis in Nurslings.

Trinci (Riv. di clin. ped.) says that pur ulent arthritis is comparatively frequent in nurslings, with fatal result when the pus is not removed by operation. It may be due to local or general causes. He divides the cause into predisposing wounds, lymphangitis, burtisis involving the joints, and osteomyelitis by propagation from septic lesions. The predisposing causes are infectious diseases, such as pneumonia, typhoid, pyemia, erysipelis, and gonorrhea. In some cases the primary disease has given a port of ingress for the germs of other diseases. In another catagory the arthritic process is a part of a morbid whole. Unhygenic conditions and feeding may determine the explosion of an arthritis; so also hereditary syphilis may begin the disorder. The principal microorganisms found in those joints are streptococcus, stalphylococcus, pneumococcus, and gonococcus, the latter causing suppuration of syphilitic lesions. Syphilis acts only as a predisposing cause. These lesions begin in the first three months of life, never after seven months. The most frequently attacked joints are the knee, thigh, shoulder, wrist, and ankle. The most important lesions are those of purulent ostoemyelitis; they generally involve the epiphysis. This may result in detachment of the epiphysis, purulent lesion of the junction with the diaphysis, rupture of a subperiosteal abscess into the articular synovial membrane, or infection by the lymphatics of a serous effusion into the joint. The agent which generates the condition is the streptococcus, straphylococcus, or diplococcus. The onset is sudden with fever, pain, and general bad condition. Palpation is painful. There may at the same time be a pyemia in the mother. Blenorrhagic arthistis is secondary to an ocular infection, not a genital infection, and never appears before the eighth day of life. It is always monarticular. The diplococcus reaches the joint by the way of the blood. The prognosis depends on the general condition of the patient the special pathogenic agent, whether there be a bone lesion or no, the number of joints attacked, and the early period of operation. If the joint be drained early the result will be good, and the joint will regain mobility.

Anatomical and Clinical Study of Anomalies of Number of the Human Placenta.

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literature. The number and shape of the placentas varies considerably, from two to five. In early intrauterine life the villi cover the membranes, while later they atrophy, except at one spot, where they form a round placenta. If there be a failure of atrophy at any point, accessory cotyledons form, each with its own artery and vein. These placentas are bi discoidal. Out of 6,701 labors this anomaly was found in nineteen cases. In another statistical report, out of 9359 labors fifteen yielded placentas abnormal in this respect. In the author's cases one had a previous endometritis, the other albuminuria and a premature dead fetus. The ovum fastening itself on a diseased endometrium develops abnormally. The complications that arise from this anomaly are insertion of one lobe low down in the uterus, perhaps over the os, and tearing of the abnormal vessels when the membranes rupture. Again, one of the accessory cotyledons may be left behind in the uterus after delivery. This generally results from attempts at delivery. This generally results from attempts at delivery of the placenta by pulling on the membranes, which causes the cotyledon to tear away. This may result in severe hemorrhage of infection. Diagnosis is aided by the roughened feeling of the membranes near the accessory placenta. The anomaly is generally recognized only after delivery. If delivery of the placenta is made slowly and without traction the accessory cotyledon will generally fall out into the hand without any trouble. In case of retention there should be no hesitation at disinfecting the hand and removing the placenta manually.

Experiments on Sugar and Other Artificial Feeding.

Borrino (Riv. di Clin. Ped.) has made an extensive series of experiments as to the action of sugars of various kinds in the artificial feeding of infants. The doctor finds that the rapid increase in weight observed on adding sugars to mixtures of milk corresponds to a lessened elimination of water by the kindeys, due to the presence in the organism of products of the assimilation of the sugar absorbed. It is not possible to state whether the elimation of sugar by the lungs and skin is also diminished. The difference in the quantity of liquid eliminated by the kidneys; the greatest increase of weight and least elimination of water is with maltose and saccharosa, and may be attributed to the easier assimilation and absorption of these sugars. Lactose is less absorbable. The other sugars cannot be as long tolerated without causing disturbances. This sugar has an important action on the intestinal movements and the prevention of putrefaction, and acts as a defense to the metabolic processes. Maltose combined with alkalies has shown itself the best sugar for administration in atrophic children. Saccharose is well tolerated by many children in methodical feeding; but lactose is most generally applicable to artificial feeding of infants.

Treatment of Vaginal Cystocele or Preuterine Hernia.

Violet (Aoo. de. gyn. et d'obstet.) says that cystocele and rectocele are caused by stretching and relaxation of the musculoaponeurotic layer. which supports the uterus. We may distinguish primary prolapsus uteri, to be treated by hysterectomy or hysteropexy, eventration, and pre- and retroutering herniæ. The majority of cystocles correspond to preuterine herniæ through the anteria sacrorectogenital aponeuroses and the union of the vesicouterine ligaments. The rectoceles correspond at herniæ between the uterosacral ligaments.

The Relief of Dysmenorrhea.

Ananalgesic that is reliable in its results and yet free from all the dangers of habit forming inseparadle from opium derivatiyes, is absolutely indispensable to the practitioner who meets with cases of dysmenorrhea in his rounds. This common and distressing condition yields promptly to Phenalgin. Phenalgin should be taken before, during and for a short time after the period, and, if the patient assists the determination of blood to the parts by the use of a hot sitz bath, complete freedom from pain and a most refreshing sense of relief are certain, The headache, the general sense of depression, nervousness, and anxiety, which usually accompany dysmenorrhea, are also relieved by the use of Phenalgin. It is a distinct and most efficacious nerve sedative, acting principally on the sensory portion of the spinal cord and is free from depressing action upon the heart. Women who suffer from dysmenorrhea are usually in so run down a state that they succumb easily to the opium habit if they have been so unfortunate as to secure a prescription containing morphine, codeine, or heroin, and the scientific and humane practitioner will not dream of incurring such a risk. The great majority of these cases are nor susceptible to surgical treatment, as no obvious lesions is discernable. They depend upon some obscure disturbance of nerve function and that is why they yield quickly and permanently to Phenalgin.

Other treatment is that dictated by study of each individual case; as a rule, rest and

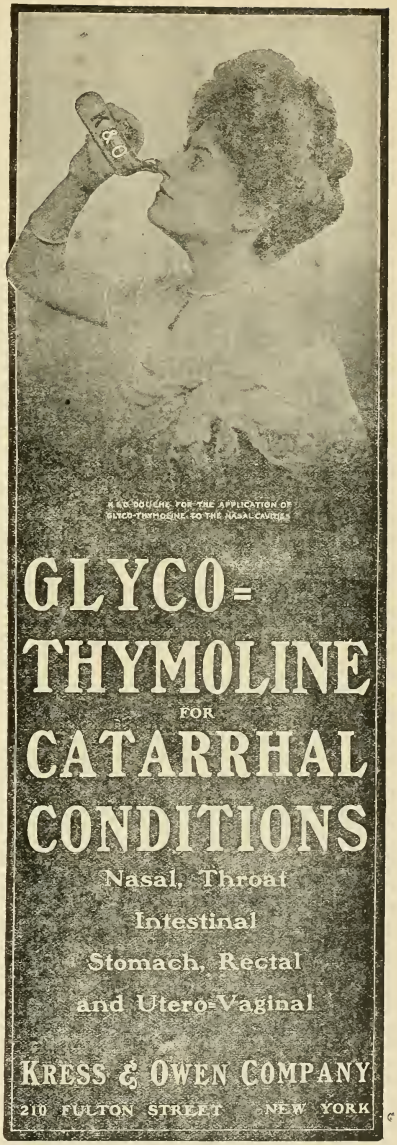
the exhibition of some tonic are all that is required to supplement the immediate pacyifying effects of Phenalgin. It is not necessary to continue Phenalgin after the pain is relieved, and no craving for it will be experienced by the patient. In addition, Phenalgin will not interfere with the gastro-intestinal functions in the slightest degree. It neither diminishes secretion nor paralyzes peristalsis and it will in no instance cause constipation. Phenalgin is a welcome aid to the physician who practises among women, most of whom are unable to modify their method life in any way, but who must have relief without danger of poisoning or incurrence of habit.

Miscellaneous.

The National Confederation of State Medical Examining and Licensing Boards will hodl its Twenty-first Annual Meeting in Chicago, Ill., on Tuesday, Feb. 28th, 1911, at the Congress Hotel.

The subjects to be taken up at this meeting will be a consideration of the State Control of Medical Colleges; a report by a special committee on Clinical Instruction; a report on a proposed Materia Medica List by a special committee; the report on a paper presented at the St. Louis meeting by Mr. Abraham Flexner of the Carnegie Foundation for the Advancement of Teaching; and some special papers on such subjects as the Regulation of Medical Colleges Necessity for Establishing a Rational curriculum for the Medical Degree, and others by men eminently qualified to prepare papers upon such subjects.

These topics are all of practical and vital interest to medical colleges, medical examining boards, the ppofession at large and the public. The Symposium will be composed of ten medical colleges, state medical examining and licensing boards and the medical profession. The contributors of papers to the Symposium on State Control of Medical Colleges are men of the highest attainments in matters pertaining to state, law and the medical profession, and their producing will be worthy of the most careful consideration. The chief object of the Symposium is to determine, as far as possible, the feasibility of placing Medical Colleges under State control. The special committee on Materia Medica made a report at the St. Louis meeting of the Confederation, June 6th, 1910, and it was continued and instructed to report again at the next annual meeting of the Confederation in 1911. The report of this committee made at St. Louis has re-



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ceived very favorable comment by many of the editors of medical journals, and should receive at the Chicago meeting extended and careful consideration. The report on Mr. Flexner's paper is published in the proceedings of the St. Louis meeting of the Confederation, page 64, and will be open for discussion at the Chicago meeting.

An earnest and cordial invitation to this meeting is extended to all members of State Medical Examining and Licensing Boards, teachers in medical schools, colleges, universities, delegates to the association American Medical Colleges, to the Council on Medical Education of the A. M. A., and to all others interested in securing the best results in medical education.

The officers of the Confederation are, President, J. C. Guernsey, M. D., 1923 Chestnut St., Philadelphia, Penn.; Secretary-Treasurer, George H. Matson, M.D., State House, Columbus, Ohio.

The Bromides.

"The great popularity of Peacock's Bromides has led to the introduction of numerous substitutes, alleged to have the same composition and efficacy. While imitation is the sincerest sort of flattery, it has been demonstrated by careful chemical analyses made by prominent chemists that these preparations do not bear the faintest resemblance to Peacock's Bromides in composition, either as regards the purity of their ingredients or the presence of all the mixed salts."

Seng.

"A therapeutic study of Seng indicates that it acts in a two-fold manner—first, by directly stimulating the glands of the stomach and intestines; and secondly, by imparting tonicity to the muscular coat of these structures. As a result of its administration the gastro-intestinal secretions are promptly augmented, and the mechanical functions generally described under the loose term, peristalsis, are re-established and reinforced. The digestion of food is substantially increased and fermentative fluids and general stagnation are promptly overcome. With a decrease of fermentation, the gastric irritation, pain, gas formation and consequent distention are rapidly controlled."

Intestinal Dyspepsia.

A "lazy" or inactive liver is more often responsible for abdominable discomfort and the varied symptoms of indigestion, and Intestinal Auto-Toxemia, than is generally supposed.

Why should this be so?

The pathologic sequence seems to be about as follows: Flrst, Hepatic Insufficiency, and a consequent sluggish bile flow, deprives the intestine of its natural stimulus to peristalsis; both bile and bowel drainage are thus interfered with and Constipation results.

Second, when nature's antiseptic, antitoxic and laxative secretion (the bile) is insufficient in quantity, and thick and tenacious in consistency, stasis and putrefactiou of the intestinal contents ensue.

Third, the toxic products of such putrefaction are absorbed and Auto-Toxemia results.

In such cases, Indican, in varying proportion, is usually found in the urine.

This pathologic chain is more or less familiar to every physician.

As to remedy, calomel, podophyllin and "quick stirrers" are first thought of. In many cases they help, temporarily, but are they true physiologic cholagogues? Does not their action depend upon upon their irritant properties? Does not hepatic inactivity usually re-ensue after active liver stimulation and catharsis?

Tablogestin (Tablets of Chologestin) is a true physiologic cholagogue, by virtue of its natural bile acid salt (sodium glycocholate) and normal salicylate from oil of wintergreen. Its action is not that of an hepatic irritant. It overcomes the physiologic deficiency (insufficient percentage of bile acids) which is usually respousibte for hepatic torpidity. The contained pancreatin (U. S. P. Standard) assists intestinal digestion generally. The natural sodium salicylate acts as an intestinal antiseptic and the sodium bicarbouate contributes the necessary alkalinity. The dose of Tablogestin is 3 tablets, after each meal, followed by a liberal draught of water. Formula, samples and literature will be forwarded to physicians, upon request, together with a handsome "Indican Color Scale" with approved test and interpretation, by F. H. Strong Company, 58 Warren St., New York.

For nervousness, sleepless and sexual excitement, characterized by erections or even chordee, various authorities vary in their recommendations. Ringer recommends the use of aconite and camphor. Bartholow and Phillips both advise the administration of lupulin. The value of Hyoscyamus has been appreciated by many medical men for a long time, and is quite valuble. Bromidia is to be highly recommended, since it consists of chloral, bromide, hyoscyamus and canabis indica, and acts as a sommifacient, spinal sedative and hypnotic. The dose is is a drachm to two drachms on hour before bed time.—American Journal Dermatology.

An Easily Digested Cod Liver Oil Product.

The therapeutic value of a cod liver oil preparation depends entirely upon the ease with which it is digested and assimilated. If it distresses the stomach and is not assimilated its value as a therapeutic agent is nil. Thus the need of choosing a cod liver oil product that is well received by the stomach and is quickly assimilated. In Cord. Ext. Ol. Morrhuæ Comp. (Hagee), these several requirements are met. In this Cordial the essential principles of the plain oil are preserved, its disagreeable features being eliminated. Possessing every therapeutic virtue of the crude oil with the added advantage of palatability, Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is the ideal cod liver oil product, and may be depended upon to produce the results expected in chronic bronchitis, tuberculosis and all states indicating cod liver oil.

The Best Alkaline Wash.

There are many alkaline preparations on the market that are used daily with varied results in conditions where such a preparation is indicated. I have tried most of them in all conditions and after an impartial trial I am compelled to say that the preparation known as "Glyco-Thymoline," made by Kress & Owen Co., stands at the head of the list; its formula is one that would commend its use, the ingredients being of an antiseptic and non-irritating nature.

Having formed this opinion of "Glyco-Thymoline," I have concluded to report a few clinical cases where it has given me good results.

Case No. I. M. L., age 23 years, came under my care suffering with a distressing case of Ozema. The turbinated bones on both sides of her nose presented a condition of marked atropy; there was a complete loss of smell and taste, and formation of crusts in the nasal chamber; the stench of same was foul. She complained of continual headache, and other symptoms of a depleted and run down system. I placed her on a tonic of Iron, Arsenic and Strychnia, internally; locally I ordered the use of "Glyco-Thymoline" in K. & O. Douche three times a day diluted. After one months treatment the crusts had ceased to form; there was a complete restoration of taste and a slight return of smell; the general health was improved, and the patient herself well satisfied with results.

Case No. II. C. A., age 8 years, came to me suffering with a severe Otorrhea following Scarlet Fever. There was a mucopurulent discharge from both ears that rendered the child completely deaf; the auditory canal was excoriated and sore, and the general health below par. I used Cod Liver Oil internally, and syringed the ears three times a day with "Glyco-Thymoline." At the end of one month the discharge of pus had stopped; the hearing much improved, and the child's general health very much better.—W. Harper Sloan, M. D., Chief Ear Department, Medico-Chirurgical College, Phila., Penn.

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Special Syphilis Number.

The Editors of the Interstate Medical Journal, St. Louis, announce the publication of a symposium number on Syphilis for January.

The list of articles reads as follows:

The Influence of Syphilis on Civilization —Wm. Osler, M. D., Oxford University.

Present Status of the "Noguchi Test"—Hidego Noguchi, M. D., New York.

On the Means of Finding the Spirochaeta Pallida, with Special Reference to the India Ink Method. (From the Laboratory of the Michael Reese Hospital.)—J. S. Cohn, M. D., Chicago.

The History and Methods of Application of Ehrlich's Dioxyiamido-arseno-benzol. —(From the Royal Institute for Experimental Therapeutics)—Lewis Hart Marks, M. D., Frankfort, a m.

Recent Progress in the Treatment of

Syphilis—H. Hallopeau, M. D., Paris.

Treatment of Syphilis with Ehrlich-Hata "606"—Abr. L. Wolbarst, M. D., N. Y.

Syphilis of the Nervous System—Ernest Jones, M. D., Toronto.

Syphilis and Pulmonary Tuberculosis—Robert H. Babcock, M. D., Chicago.

Syphilis as a Cause of Pauperism—A. Ravogli, M. D., Cincinnati.

Giant Cells in Syphilis—John A. Fordyce, M. D., New York.

Personal Observations with the Ehrlich-Hata Remedy "606"—B. C. Corbus. M. D., Chicago.

Syphilis and the Public.—Isadore Dyer, M. D., New Orleans.

Sanitary Regulation of Prostitutes—Prince A. Morrow, M. D., New York.

In addition to the above, there will be four "Collective Abstracts" (critical reviews of recent literature in collective form) on (1) Ehrlich-Hata "606", (2) the Cerebrospinal Fluid in Syphilis and Parasyphilitic Diseases, (3) Serum Diagnosis of Syphilis, (4) Diagnosis of the Osseous Lesions of Syphilis by the X-Ray,

The Eye and the Upper Respiratory Tract.

Cobbledick, in the London Lancet, says that in every eye case complicated with long standing nasal or post-nasal catarrh, an expert should examine the accessory sinuses, which latter, if diseased, should undergo radical treatment; by this means will the eye affection be benefited. Or an eye operation is contemplated, not only the conjunctiva, but also the mouth and nose, the nasal duct and the lachrymal sac should be examined. No operation should be considered in the presence of pyorrhœa, atrophic rhinitis or chronic sinusitis; the styphlococcus toxins may so poison the system as to render possible an endogenous eye inflammation as a result of the operation trauma. The condition of the operator's mouth and nose must also receive consideration; carious teeth, pyorrhœa, or nasal affections should be looked upon as a possible source of coryza, and precautions taken accordingly; there should be as little talking during the operation. The pneumo- and the stophylococcus play an important part in post-inflammatory eye affections: these bacteria are not frequent in the conjunctival sac, but the mouth in a common habitat. Hence the great likelihood of infections from the exhalations of operator or assistants. Blindness has resulted from the onset of optic atrophy in consequence of intranasal operations. A not uncommon accident has been entry of the orbit when exploring the antrum with a probe or tracer or in forcibly boring into the aveolus of the superior maxilla, for drainage, loss of control and the absence of a stop on the drill has resulted in puncture of the orbital floor and injury to the optic nerve or orbital infection. Forcible removal of bony nasal spurs and of the middle turbinate may produce a fracture involving the optic canal the formation of callus, pressure of the callus on the nerve and subsequent atrophy.

Phlegmon.

A slight excoriarion of the foot in a young soldier suddenly gave rise to a diffuse phlegmon with gangrene, which progressed with alarming rapidity. A combination of three methods of treatment was employed: 1. Linear applications of thermo-cautery to the foot and leg. 2. Injections of hydrogen peroxide, nine in number, made circumferentially in the subcutaneous tissues of the limb, 1 or 2 centimeters above the margin of the infected area. 3. Bier treatment, an Esmarch rubber bandage being applied above the knee to induce venous stasis in the part. This method was used three times daily (two hours at each application) for the first two days. then twice daily for two days. Prompt results were obtained. On the second day the temperature showed a tendency to abate and on the third day fell to 101° F. On the sixth day it was 99.8° and on the eighteenth day remained normal both morning and evening. The local treatment included also daily bathing in warm permanganate solution and a wet dressing of hydrogen peroxide. The author sees no advantage in making deep or intramuscular injections of hydrogen peroxide in such cases, but advises subcutaneous injections so disposed as to form a ring of the solution around the limb, offering an uninterrupted barrier to the spread of the infection through the lymphatics.—Petit Archives de medecine militaire.

The Ureter in Cancer of the Cervix Uteri.

Leitch, (Jour. Obst. Gyn. Brit. Emy.,) states that envolvement of the ureter is the commonest occurrence in postmortem examinations of cancer of the uterus. It can be demonstrated also in operable cases. This involvement consists in the production of stricture frequently (a) by contraction of growth in the surrounding parametrium.(b) by invasion of the ureter wall; and sometimes (c) by fibrosis in the parametrium, due either to chronic inflammation or to the reaction to cancer cells which have disappeared locally. The ureteral wall may be invaded by cancer directly

Each return of the season in which these affections prevail witnesses an increase reliance on the part of physicians on

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from the surroundings, the invasion being sometimes evident on naked eye examinations, at other times, even when extreme, demonstrable only by the microscope. Lymphatic permeation of the ureter does occur, and the lymphatic vessels of the ureter and parametrium probably communicate. The nature of the surrounding tissue in the parametrium, the open texture, the proximity of the principal lymphatic vessels from the uterus, the danger of invasion and the peculiarity of the blood supply render resection of the parametrial portion of the ureter advisable when the parametrium is invaded.

Duodenal Cancer.

With regard to diagnosis, there is no doubt that the principal and often the only symptom of duodenal ulcer is pain. The pain is usually severe and,in many cases comes on two to four hours after food. This pain is often relieved by taking food. Closely allied to this pain, which is relieved by taking food, is the so-called hunger pain, which consists in an irresistible craving for food, together with pain, which is temporarily relieved by eating.—Bidwell in the London Medical Lancet.

Nephropexy.

Lenk (Deut. Ztsch. f. Chir.,) records a method which in his experince has the advantages of replacing the kidney in as correct anatomical position as possible, of securing its permanent fixation, of completely avoiding injury to surrounding organs, and of having a very simple technic. As fixation of the kidney in too high a position sometimes causes pain, if the doctor makes it a point before operating to determine whether or not complete reposition of the organ is well tolerated by the patient and makes note of what position of the kidney affords the patient the most relief. For fastening the organ he makes use of a strip tendon from the psoas minor, which is passed under the capsule at the lower pole of the kidney and then fixed to the twelfth rib. In three cases operated by this method the results were very satisfactory.

General Anaethesia by Meaus of X-Rays.

In the New Zealand Medical Journal, after reading the work of Leduc, of Nantes, on the production of general anæsthesia in animals by means of the corrupted electrical current, he was struck with the idea that similar effects might be produced by the x-rays. The tube used was a hard Crooke's, the strength of current in the coil 5-6 amperes; the length of spark 12 inches, and the strength of current in the tube itself 2-3 milliamperes. The following are the Dr's. suggestions with regard to the best positions in which to place the animal: "Draw an imaginay line at right angles to the surface of the anti-kathod; on this line take a point one inch from the surface of the Crookes' tube; place the animal to be anæsthetised so that the imaginary line cuts the back of the skull at the point indicated." Anæsthesia is complete in two to three minutes after the commencement of the exposure, the time varying slightly in different animals. The length of time varies inversely as the strength of the current and the distance of the animal from the tube. Previous to the onset of anæsthesia there is a stage of excitement during which the animal struggles convulsively. The struggles gradually decrease until unconsciousness and complete relaxation are present. The breathing and heart-beats lessen in intensity. Anæsthesia lasts five to seven minutes, during which there is completely insensibility to external stimuli. As the effects pass off the heart commences to beat more strongly and the respirations become deeper. Consciousness gradually returns, the animals stands up, and moves about in a dazed fashion. Finally it runs about as well as ever. There are no after effects, such as nausea, and no apparent impairment of intelligence. The results have been approximately the same in all cases, and no death has occurred. He believes that radium emanations may have a similar effect of inducing anæsthesia in that the gamma-rays of radium are comparable to the x-rays, and resemble the latter in penetrative power. The Dr. is uncertain whether the subject of x-rays anæthesia will ultimately prove of more than academic interest, and would welcome further experiments with a view to elucidating the point. The author is at present investigating the possibiliies of blue light as a producer of anæsthesia.

Demonstration of Gastric Ulcer by the X Rays.

Rieder (Munchener Medizinische Wochenschrift.,) says that a fresh ulcer of stomach cannot be demonstrated by the x rays, at least usually. If it is deep, callous, or perforated the diagnosis may be possible, at least indirectly, through the pathological process taking place about the stomach. The roentgenological demonstration of secondary changes in the form and size of the body and openings of the stomach caused by processes of contraction and perigastritis is of great value, for it permits conclusions to be drawn regarding past, and perhaps still existing, ulcers and gives im-

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AMONG THE FEATURES IN OUR JANUARY 1911 NUMBER ARE:

Granuloma Fungoides [Mycosis Fungoides]—by P. G. Unna, M. D., of Hamburg, Germany
Brewer's Yeast in the Treatment of Ulcers, Necrotic and Tubercular Conditions—by Roswell Park, M. D., of Buffalo, New York.
"On New Methods of Diagnosis and Treatment of Lesions of the Neck of the Bladder and Posterior Urethra—by Leo Buerger, M. D., of New York City.
"Epithelioma and its Treatment"—by W. H. Wallace, M. D., of Brooklyn, New York.
"Syphilis of the Naso-Pharynx"—by Charles W. Richardson, M. D., of Chicago, Ill.
"Treatment of Bubo"—by Nathaniel P. Rathbun, M. D., of Brooklyn, N. Y.
"Epochs in the History of Therapeutics"—by H. Lyon Hunt, M. D., of New York City.
"Symptomatic Movable Kidney"—by P. Duncan Littlejohn, M. D., of New Haven, Conn.
"Tubercular Epididymitis Treated by Intramuscular Injections of Soluble Mercurial Salts—by Albert E. Mowry, M. D., of Chicago, Ill.

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portant indications as to treatment. Finally the x-ray examination is of good service in the distinctive diagnosis between ulcer and primary carcinoma, especially when the other clinical methods of examination are freely used with it.

Diabetes.

Phosphoric acid preparations are believed by the author to be valuable in the treatment of diabetic cachexia. He makes use of the following combination: Phoshoric acid, 5 grams (75 grains); acid sodium phosphate, 10 grams (150 grains); distilled water, 300 grams (10 ounces); one tablespoonful to be taken in a glass of water at every meal. The treatment may have to be discontinued if the digestion is disturbed. It is contraindicated by albuminuria and nephritis. Cautru Journal de medicine de Paris.

Nutrient Suppositories.

The comparative uselessness of nutritive enemata has led Boas to suggest replacing them by nutritive suppositories, consisting of crystallized egg albumin, dextrin salt and cocoa-butter. If these suppositories are made two and a half inches long and half an inch in diameter, they will contain a little over 46 calories. Four or five of these suppositories can readily be introduced daily, so that the patient receives some 230 calories. This, of course, does not represent a sufficient nourishment, but it is greatly superior to anything that can be attained by means of nutritive enemata. In addition, the necessary water must be supplied by means of two saline enemas daily of a pint each. The suppositories are well tolerated and represent a distinct advance in rectal alimentation. Both crystallized egg-albumin and dextrin are readily obtainable from dealers in chemical supplies.—Berliner klin. Wochenscr.

Meat Diet in the Tuberculous.

Vandeputte says that the tuberculous subject loses in weight because of increased waste and defficient nourishment. The increased waste results from the fever, the profuse sweats, and the expectoration, as well as the inability of the digestive organs to assimilate foods. The results of a meat diet are by no means brilliant; tolerance fails before a sufficient amount has been taken to feed the body. Man is not a carnivorous animal in the normal state, and cannot become so in a pathological state. If too much protein is taken bad digestion, flatulence, and diarrhea result, due to intoxication from poisonous materials ingested. When the meat is replaced by vegetables these symptoms abate. A mixed diet has these advantages; it keeps up a good appetite; continues the normal function of the digestive tract, and facilitates assimilation. This is necessary for the cure of the individual. If the action of the liver is not good the whole organism suffers.—Le Nord Medical.

Use of the Roentgen-Ray Without Dermatitis.

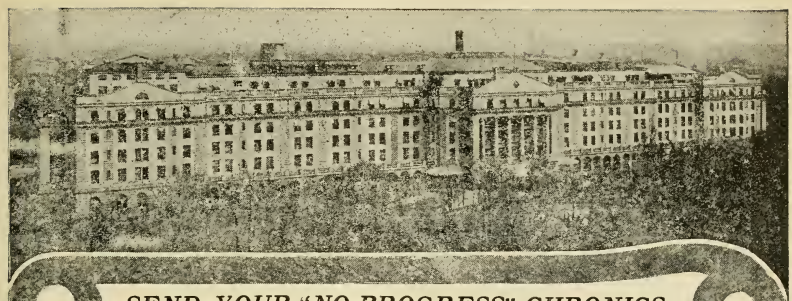
In discussing this subject, Geyser says that the cathode stream is a compound radiation consisting of alpha, beta, and gamma rays. Each one of these rays has certain properties of its own; especially do they differ as to their penetrative power. The emanations from radium are indentical with those of the cathode stream. When irradiated, the cells of the tissue suffer cleavage or splitting up, the nucleus being first affected, and the protoplasm and connective tissue last and least. Roentgendermatitis is, therefore, not only unnecessary, but absolutely contra-indicated in therapeutics. The best means of preventing dermatitis is to avoid the absorption of any rays whatever by the integument. This may best be accomplished by employing a suitable tube with a flat crown-glass window, all the rest of the tube being made of lead glass. This crown-glass window is brought into direct contact with the lesion to be treated. By this method even the softest rays pass completely through the skin without absorption, and do their work on the deeper tissue.—Arch. Roentgen Ray, London.

Critical Observations on the Ehrlich-Hata Treatmeut.

The laity are demanding treatment for all forms and stages of syphilis as a result of the newspaper notoriety of the treatment but the physician must apply it only upon strictest indication, viz., cases of severe type, especially those refractory to mercurials, cases with mercurial intolerance; cases which relapse after or during mercury cure; incipient cases, before the rosela appears, and cases never treated with mercurials, etc. The arsenobenzol remedy may be used in combination with other specific treatment in suitable cases. Finally, the use of the remedy in parasyphillis must be made a matter of careful experiment.—Berliner klinische Wochenschrift.

Ligation of the Hepatic Artery.

Narath records an additional case of ligation of the hepatic artery to the four already



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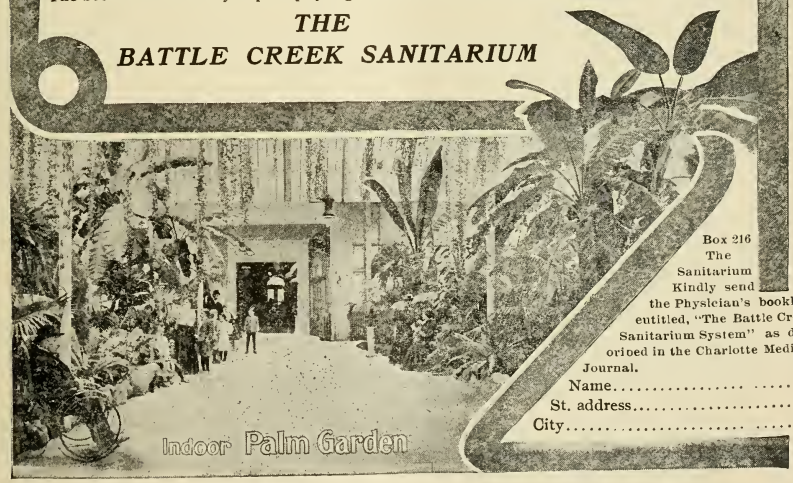

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on record. At the operation the Dr. found a callous ulcer perforating the wall of the stomach, the liver and pancreas, which necessitated a circular resection of the stomach. Owing to an accidental injury of the left branch of the hepatic artery, ligature was required, which was followed by extensive necrosis of the left lobe of the liver. From a study of the cases reported and experiments on animals, he concludes that ligation of the trunk of hepatic artery is permissible, provided that at least one of the collateral channels is intact, but that ligation of the a. hepatica propia above the point where it gives off the a. gastroepiploica dextra is only justified in exceptional cases, and may be followed by small areas of hepatic necrosis. Ligation of the a. hepatica propria is not admissible on account of the great danger of necrosis of the liver, and in injuries an attempt should be made to suture the vessel rather than to ligate. Ligature may be exceptionally employed in cases of peripheral aneurism.

Hemorrhoids in Children.

Karnitzki mentions the case of a girl three years of age, who had four hemorrhoidal nodules at the anus, one of which attained the size of a walnut under straining at stool. Pains were present on defecation, but no hemorrhage was noted. Among about 2.500 cases of hemorrhoid, collected from the literature, 115 (4.6 per cent.) concerned children; 14 up to the age of five years, 4 from five to ten years, 9 from ten to fifteen years, and 88 from fifteen to twenty years. The disease is accordingly rare in children. The Dr. suggests two anatomophysiological groups, congential (anomalies of development) and acquired. The more frequent occurrence of hemorrhoids after the age of fifteen years is due to the increase of the blood pressure at this age, when the heart and the vascular system are put under a greater functional. strain.—

Nail Extension in Fractures.

Anschutz (Deut. Ztscht, f. Chir.) believes this method of value in several cases in which ordinary extension proved unsatisfactory. It is particularly adapted for the treatment of complicated fractures. As the nails are driven only into the distal fragment the rest of the limb is left free, while the force of the traction may be enormously increased, so that even in chronic cases the shortening of the limb is overcome in a remarkably short time. Besides, the procedure is not painful. The only disadvantage is that soft bones may be split by the nail, as the author has observed in two instances. This, however, can be obviated if the nail is driven into the compact diaphysis at some distance from the epiphysis. Although there is a possibility that the insertion of the nail through the skin may cause infection, the author makes light of this objection, though he has observed slight infection of the wound in two instances. Excellent results were obtained in two cases of pseudoarthrosis, in which callous formation speedily occurred, and in another case of shortening of the femur of 9 cm., this was reduced to 7 cm., notwithstanding that the procedure was resorted to 143 days after the injury. While the method should be employed only in exceptional cases in which extension fails, and only in the hands of surgeons acquainted with the technic, it is a very valuable resource where other measures fail.

A New Serum Reaction for Syphilis.

W. de la Motte (Deutsch. med. Wochenschr.) says that in spite of its great diagnostic value, the Wassermann reaction can never become a routine method for the practising physician, so long as its performance requires a well-epuipped laboratory and a trained bacteriologis. Many attempts have been made to simplify it or to substitute simpler tests, but so far these have not been altogether successful. He reports promising results with a substitute that was first suggested by Porges. The method in brief is as follows: Equal parts of clear blood-serum from the patient to be examined and of a one per cent. solution of sodium glycocholatee are mixed in a small test-tube, which is then set aside for sixteen to twenty hours. At the expiration of this time, if the reaction is positive, a precipitate has appeared, which usually forms a small clump, floating on the surface of the mixture. He made simultaneous tests of the Wassermann and the Porges reactions in a considerable number of syphilitics. On the whole, the two methods gave results that correspond pretty well; certainly, in his hands the Wassermann test did not seem superior to that of Porges. The method clearly deserves further trial.

The Reduction of Blood Pressure in Arterio-sclerosis.

Rudolp (British Medical Journal.,) considers the spasm to be in the great majority of cases of toxic origin, and that attention should be directed to the lessening of this toxæmia, which is generally recognized to be due to nitrogenous bodies. In the intestinal tract certain bodies, technically known as the aromatic series, are produced by the decomposition of proteid materials;

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and these being absorbed may either by direct action on the vessels or in some less direct way, produce vasoconstriction. These poisons must first pass through the liver, and, if this organ be active, may be destroyed there and do no harm. It seems to be especially the protreid of meat and eggs that produces most toxins. If the toxins once reach the blood they are chiefly got rid of by the kidneys. Hence it is that Huchard puts as the second most important factor in the production of the presclerotic stage of arteriosclerosis insufficiency of hepatic and renal functions.

If the patient shows a family tendency to arterial disease he believes that putting him chiefly on a lactovegetarian diet, cutting out excessive smoking and the use of alcohol, and the administration of a saline every morning, with an occasional mercurial purge. If such a regime be not sufficient regular small doses of potassium iodide may help very much. Diuretics may be useful, especially theobromine.

As regards vasodilators, he says they usually act even in profound cases of arteriosclerosis and it has been shown that their action is more prolonged here than in normal vessels. The Dr. classifies them in the following order as regards their speed of action and associated evanescence of effect: Amyl nitrite, nitroglycerin, spirit of nitrous ether, sodium nitrite, erythrol nitrate, and mannitol nitrate. The effect of the last named has been found to be more prolonged than any of the others.

The Dr. is somewhat afraid of the spirit of nitrous ether as dispensed in Canada. There is, he says no standard for strength in the British or Canadian pharmacopœias, but in the American it must contain 4 per cent. of the ethyl nitrite when freshly prepared. When made according to the directions of the British Pharmacopœia it should contain from 2.75 to 1.75 per cent. Sodium nitrite also rapidly oxidizes and thus loses its action, so should be freshly prepared. Physicians probably often fail to get the action looked for with these drugs on account of these depreciations.

The Treatment of Acute Laryngeal Dyspnoea in Children.

Barwell in the London Medical Lancet, discusses the causation of the various forms of laryngeal obstruction in children and arranges the various conditions into groups. As to the treatment of spasm, this he observes may be considered under two heads, that of treatment during the paroxysm and that of preventive treatment between the attacks. The spasm of laryngismus stridulus is very short and sharp and there is little time to put the child into a hot bath and pour cold water on the head, as has been recommended. The quickest and surest way to relieve the spasm is to hook the epiglottis forward with the finger, a manipulation which can easily be taught to the mother or nurse. The spasm also may cease on stimulating conjunctiva by touching it with the finger or on tickling the nasal mucous membrane with a feather. The inhalation of amyl nitrite may be tried and can be quickly employed by means of breakable glass capsules. A fatal result is extremely rare.

In the preventive treatment overloading of the stomach must be carefully avoided, regular action of the bowels ensured, and all gastrointestinal irritation prevented, while a course of rhubarb and soda or magnesia is indicated; a change of air to a higher locality, or even to the top of the house, is very beneficial; and rickets, if present, must be treated. Adenoids are a powerful source of irritation and their removal in children predisposed to laryngismus is an essential part of the treatment. As a sedative, if the attacks are frequent and severe, small doses of bromide may be prescribed or, better, the fluid extract of grindelia in doses of ten minims in milk every three or four hours.

The spasm of laryngitis stridula is neither so acute nor so transient as that of laryngismus and can usually be allayed by the induction of vomiting. Ipecacuanha is the most useful emitic for the purpose, as its expectorant action is of value in the treatment of the accompanying laryngitis; drachm doses of the wine or five grains of the powdered root may be given every half hour to a child of two years of age until vomiting occurs. A combination of ipecacuanha and tartar emetic may act better than either drug alone, and Whitla recommends ten minims each of wine of antimony, wine of ipecac, and syrup of squill every fifteen minutes until vomiting occurs for a child of one year. When the spasms are severe amyl nitrite may be tried, or ni-

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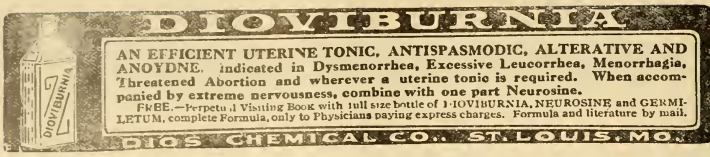
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troglycerin, 1-500 grain every three hours, and sometimes belladonna is of value. For the rest, the treatment is that of the laryngitis, the child being kept in bed in a warm, well ventilated room and the ipecac mixture continued three hours after the cessation of the spasm. The dyspnoea is likely to recur on the next few nights but with diminishing severity; if it lasts longer a nourishing diet and tonic treatment are indicated. Children subject to laryngeal spasm nearly always suffer from adenoids and these should be removed after the laryngitis has subsided. If the laryngitis grows worse and the dyspnoea becomes continuous and severe one may be sure that oedema is occuring or membrane forming in the laryn. An attempt should then be made to inspect the larynx, and this is frequently possible even in very small children, as a rapid glimpse is sufficient to show the swollen upper aperture or the whitish membranous deposit; failing this the part should be quickly palpated with the finger. If oedema is present leeching may be tried, one or more being applied over the manubrium sterni rather than to the neck, so that the bleeding may be arrested, if necessary, by pressure. An icebag to the neck is hardly permissible in very young children, but may be applied with caution in older cases for not more than about three hours, and a spray of adrenalin may be used, but too much time must not be spent on these palliative measures, for children are quickly exhausted by dyspnoe and collapse with great rapidity. If the upper aperture can be felt to be swollen it should be freely scarified with a guarded curved bistoury guided by the left forefinger on the affected part. This often gives rapid relief, but if it is insufficient, or if the swelling is out of reach in the subglottic region, tracheotomy or intubation must be performed without delay.

Action of Homogeneous Products of Autolysis of Fetal Tissues in Malignant Tumors in Man.

Fichera, in the course of experiments on vaccines, has noted that spontaneous malignant tumors in young rats were extremely rare, that resistance was conferred upon rats with reference to neoplasms by inoculation with embryonal and fetal tissues, and that embryonal and fetal tissues treated by autolysis when injected under the skin caused involution of neoplastic grafts. He experimented on the injection of homogeneous products of fetal autolysis upon victims of malignant disease of the human race, the results of which he gives. Eighteen cases are included in his report; the tumors varied in nature and location; in eight there was no improvement; in ten there were beneficial results, and in five the tumors completely disappeared. Excision showed that substitution of sclerotic connective tissue for the neoplastic tissues had taken place. Hemorrhagic, necrobiotic, or necrotic zones were caused by general infections. The author thinks that persons afflicted with inoperable malignant diseases may undergo these injections without any danger of absorption of poisonous substances, especially of neoplastic origin. The author made use of tissues of fetuses from two to six months of intrauterine life.—Il Policlinico.

The Liver in Scarlet Fever.

Hildebrandt (Munchener Medizinische Wochenschrift,) states that in the great majority of cases of scarlet fever the excretion of urobilin is pathologically increased. The urobilinuria follows quite accurately the curve of temperature, so that in general the urobilinura and the fever disappear simultaneously. The intensity of the urobilinuria likewise presents a certain, though not exclusive dependence on the height of the fever. During convalescence the excretion of urobilin is commonly no longer increased. The presence of urobilinuria is the simplest and surest indication of the presence of a parenchymatous hepatitis, which occurs without icterus or bilirubinuria, and he urges that it is quite possible for the hepatitis of scarlet fever to hold the same noxious importance in the pathogenesis of cirrhosis of the liver that the nephritis of scarlet fever holds in the development of a chronic nephritis.

Vaccine Therapy.

Von Ofenheim (London Practitioner,) says that vaccine therapy has become part

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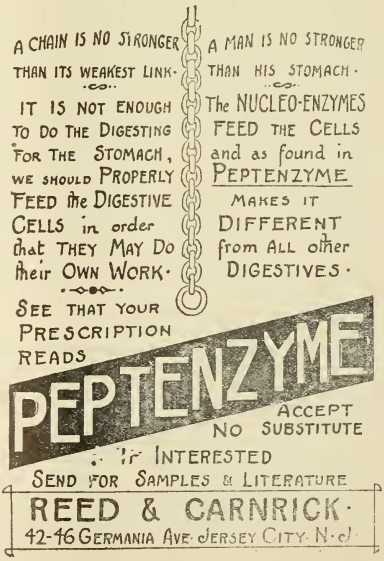
of the science of therapy—a distinct part like pharmacological therapy, surgical therapy, light therapy, electro-therapy, etc. It has to be carried out, or at least supervised, by a man who has made a special study of the subject, and who has at his command a wide experience in this particular branch, together with a perfect technique. The representatives of this part of therapy—appropriately called "clinical bacteriologists"—are clinicans, and it will be their duty. apart from their laboratory work, to keep their eyes open to all clinical symptoms, and to watdh the patient as well as the microbes. They will have to work hand in hand with the physicians and surgeons. It is just as much a mistake to exclude bacteriological treatment in the case of an infection as it would be to expect miracles from vaccine therapy, and to depend upon it alone and entirely. Even in one and the same disease, under different conitions, the case will have to be dealt with by different of therapy and only by looking at it from all sides, with an open and unbiased mind, we shall be able to do the best for the patient and for the suffering part of mankind altogether, and this is the object of therapy, it being unimportant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by which means it is obtained. To try to find the right way to this end is the duty of the medical man, whatever the special branch of his work may be.

Results of Bronchial Obstruction

Pitt(London Lancet,)says that although many cases of foreign bodies in the bronhi have been recorded, in but very few has an accurate note been made of the physical signs in the lung in an early stage of the illness. The body generally passes into the right bronchus because it is more vertical and is also slightly larger. The changes are unilateral, serious, and progressive. The following are the most important evidences suggestive of a foreign body in a bronchus, and in any such case a bronchoscope should be passed in order that the condition of the tubes may be determined, and a positive opinion formed. 1. A most important factor in diagnosis, and one which until we had x rays was absolutely essential, is the history of swallowing something immediately before the onset of an acute attack of severe dyspnoea and cough. 2. Not infrequently a whistling or wheezing sound which the patient can localize to one side, varying in quality if the object is not fixed in the bronchus. 3. Great distress, with not infrequently a constricting pain behind the sternum, made worse by movement. 4. Dyspnœa, with varing exacerbations, often intense and made worse by cough, but it may be elicited only by exertion. After a time there may be no distress. 5. Absent or, rarely, very noisy breath sounds with slight diminution of voice and tactile vocal fremitus limited to one side of the chest. 6. At first resonance on the affected side, soon consolidation with dullness, and, after a time, the signs of cavities and the simulation of phthisis; occasionlly superresonance. The physical signs sometimes vary from to time. 7. With x rays, the defective movement of the diaphragm and of the thorax, the alteration in the density of the lung, and not infrequently the outline if the foreign body itself, may be clearly made out. 8. Delay in the commencement of inspiration as compared with that on the other side. 9. Defective movement with consequent diminution in the size of the affected side. 10. Violent paroxysmal persistent cough which is apparently most marked when the object is at the bifurcation, as the sensibility of the mucous membrane is greatest here, as can be noticed when passing a bronchoscope. 11. Early pyrexia, which later becomes hectic, associated with chills. 12. After a short time an expectoration more or less profuse, purulent, often bloody, and later often foetid. 13. In some there are nausea and vomiting which may be very troublesome. 14. Pneumonia often develops in forty-eight hours; this may be septic and may be followed by gangrene.

Influenza—Pertinent Thoughts.

With each suceeeding visitation of this trouble, we have found it more and more necessary to watch out for the disease in in disguise, and to treat these abnormal manifestations; consequently we have relied upon mild nerve sedatives, anodynes and heart sustainers, rather than upon any specific line of treatment. Most cases will improve by being made to rest in bed and encouraging action of skin and kidneys with possibly minute doses of blue pill or calomel. We have found much benefit from the use of Antikamnia & Codeine Tablets in the stage of pyrexia and muscular painfulness, and as a sedative to the respiratory centres. In the treatment of influenza or la grippe and its sequelæ, its value is highly esteemed. In diseases of the respiratory organs following an attack of la grippe, pain and cough are the symptoms which especially call for sometimes to relieve. This combination meets these symptoms, and in addition, controls the violent movements accompanying the cough. To administer these tablets in the above conditions, place one tablet in the mouth, allowing it to dissolve slowly, swallowing the saliva.

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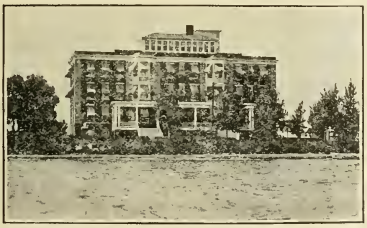

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tone Gauze and Formidine Gauze were launched in modest fashion, the purpose evidently being to let them find their way into the medical armamentarium in the natural order of events rather than by artificial fostering. Their reception by the profession must have been gratifying, for the line soon began to expand. Now it numbers six gauzes and tapes, and we note a disposition on the part of the company to bring them more prominently to the attention of physicians. For this reason a word or two in explanation of them may not be out of place.

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Parke, Davis & Co. issue a small pamphlet descriptive of their medicated gauzes and tapes. Physicians who have not received a copy are advised to write for one. The dressings are pretty generally carried in well-stocked pharmacies.

Serotherapy and Anaphylaxis in Cerebrospinal Meningitis.

Hutinel gives us records of four cases in which the serum treatment of cerebrospinal meningitis was interrupted by serious consequence of the nature of anaphylaxis. A final injection of serum, practised some days after the others, caused nervous phenomena that were serious and rapidly terminated in death. These accidents have been interpreted as the result of anaphylaxis. These results are more frequent and severe when the injections are made into the cerebrospinal cavities than when made into the peritoneum. The near proximity of the central nervous system seems to be of importance in these cases. A preventive treatment, called antanaphylaxis, has been attempted by various observers. The attempt to modify the toxins by physical and chemical means has failed. If too great heat is applied to the serum its anaphylactic properties are lost, but at the same time its curative properties are destroyed. If the serum be heated only to 56° its toxicity is modified and its therpeutic value does not suffer. All the sera prepared at the Pasteur Institute are now treated in this way. The iujection into a sensibilitized person of serum of another animal also is of value in preventing anaphylaxis. Von Pirquet and Schick interpret these phenomena in this way: the injections cause a product of reaction to be formed, a sort of antibody; this snbstauce acts on the antigen that is in the horse serum which has not as yet been completely eliminated. When a new injection is made the reaction occurs at once becanse there still remains antibodies in the organism. There are many obscure points about the subject of serum treatment. We should remember the possibility of the occurrence of serious symptoms in the use of sera as remedies, but we should not allow this to deter us in the saving of life by means of their use.—La Presse Medicale.

Danger Due to Substitution

Hardly another of all the preparations in existence offers a wider scope to imposition under the pea of "just as good" than the scientifically standarldized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of the firm of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm name of Sander & Sons is llicitly appropriated, the make-up of their goods imitated and finally the medical reports commending on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme Court of Victoria at elbourne, and others reported before in the medical literature show that every physician should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Dr. Jno. Roy Williams, formerly of Greenboro, N. C. has moved to Hendersonville, where he will continue to do tubercular work. Dr. Williams has been for several years doing special work along this line, and will no doubt be quite successful in his new home.

The Charlotte Medical Journal

VOL. LXII CHARLOTTE, N. C., FEBRUARY, 1911. No.2

Public Sanitation.*

By Dr. F. O. Hawley, Charlotte, N. C.

To any one who will reflect upon the matter, it will be plain that individual sanitation is not excluded from the consideration of public hygiene. For, in considering the whole, we have to take cognizance of the elements of which it is composed, and there can be no effective general sanitation unless it receives the co-operation and earnest support of the general public. This is particularly true of the conveyance of disease germs, which public hygiene is especially designed to prevent. One of the most common carriers of these germs is the ordinary house fly. This insect is propagated most rapidly and most numerously in the household garbage, and every effort should, therefore, be concentrated upon the prevention of its breeding. Cleanliness is our greatest aid in this respect. The garbage of the household should be kept in closed containers, so that flies cannot feed upon it and deposit their larvæ in it, and it should be removed promptly at short intervals. As one fly becomes the progenitor of millions of its kind in the course of a year, and has been known to disseminate typhoid bacilli and the germs of other contagious and infectious diseases, the importance of the destruction of the common fly cannot be under-estimated. In stables and other out-houses, it is not always easy to maintain cleanliness, and in such buildings the use of disinfectants is of great service. At least once a week, the floor should be scrubbed or mopped thoroughly with some good disinfectant solution. The ordinary soap, lye or sal soda may be added freely to the solution used.

It must be remembered that disinfection removes the danger of disease for a short time only; and that it should be repeated at stated intervals. Kreso and other commercial disinfectants are convenient in this respect, because they are practically noninjurious and is as cheap as soap. Moreover, it does not require any additional labor or special knowledge to use.

Slop cans or buckets of galvanized iron must be provided for all kitchen or other garbage; they should be cleaned at least once daily, and allowing a quantity of the solution to remain in the receptacle.

Cess-pools and sewer traps should be washed and flushed with this mixture and enough added to make the fluid good and strong. Closets, urinals and sinks should be washed daily with the mixture, particular attention being given to the rims, plumbing and surrounding walls and floors which are always likely to become damp and unsanitary from leakage or overflow. Whenever water is standing in the bowls, add sufficient to make a strong mixture.

As dust contains germs, it is advisable to sprinkle the floors with clean saw dust, moistened with the mixture, before sweeping. Never use feather dusters. They do not remove dust; always use a cloth, moistened with the mixture, the baseboards, window sills, moldings, walls, (except varnished surfaces) should be wiped daily after sweeping. It stands to reason that, in order to be effective, disinfection must be thorough. It should reach all places where germs may have lodged. Disinfection does not come from dropping a disinfecting fluid into receptacles or plumbing fixtures, for falling on a porcelain or iron surface, it is immediately washed away. It will thus be seen, the ordinary drip machine is practically worthless for disinfecting purposes, in fact, it is worse in that it is positively dangerous, since by its discharge of an aromatic fluid, it tends to cloak unpleasant odors, thus creating the impression that the surroundings are sanitary when in reality they are not. Beware of deceptions. They are dangerous. Particularly so in the case of disease germs. I consider formaldehyde as an ideal disinfectant, because it offers a safe and reliable means of destroying disease and cleansings, deodorizing and purifying habitations and buildings which, on account of their public nature, should receive particular attention to keep them in a sanitary condition. It is well known that some disease germs, such as that of tuberculosis are disseminated in the human sputa. For this reason, expectoration in public places is strongly discountenanced by sanitary authorities. Wherever it is permitted, however, cuspidors should be provided: These must be emptied daily and cleansed.

In view of the danger attending the presence of the common fly and the disease carrying mosquito, every effort should be made, of course, to keep these insects out of dwellings. All the windows should be carefully screened and, by that, I do not only mean the windows of the bed rooms and living rooms, but those of the base-

*Read before the Seventh District Medical Society of North Carolina, Charlotte N. C., Dec. 6th, 1910.

ment as well, for, if the last precaution is neglected, the insects will find their way into the house through the cellar windows and get all over the residence.

Rats and mice also have been known to spread disease, not only by carrying the germs on their bodies, but by lodging offal under floors, where it is allowed to rot and create unsanitary conditions. For this reason, war should be continually waged against these rodents, not only by means of the trap, but also by means of arsenical and various other poisons. One of the best methods of destroying these little animals is afforded by Azoa, which is a rat virus. This bacteriological product is harmless to all animals except rats, mice and field mice. It is mixed with oat meal and placed where the rats will find it. It produces an ingestion, a disease from which the animals die in about two weeks. Azoa drives the victim to the open, out of barns, etc., so that no matter how many are killed, no bodies are left to decompose in closed quarters.

In connection with the sanitation of pubsic buildings, as well as private residences, ventilation is of the highest importance. Fresh air, sunshine and cleanliness are most essential to heal. The rooms in buildings of all kinds should be thoroughly aired every day, and the sunshine should be freely admitted. In the hygiene of the household, use antiseptics which are of great value. They are particularly serviceable on occasions when a more powerful agent is not required. They can be freely applied externally to the human body, does not stain fabrics, and does not produce any unpleasant odor. Their greatset household value may be realized in the prophylaxis of infectious disease, by means of sprays, gargles, etc.

In the prevention of disease, which is the main object of public sanitation, quarantining of patients who are stricken with a contagious or infectious disease, is of the first consideration and must be strictly maintained. It stands to reason that laxity of quarantining would lead to conditions that are very much worse than no quarantining at all. It is evident, that the health officer who means to do his duty must not be a respecter of persons and must rigidly enforce the isolation of patients who are liable to spread disease and produce an endemic, no matter who may suffer in consequence. This is particularly true in smallpox, but luckily we possess another means of preventing the dissemination of this malady. I refer to vaccination. Now, it has become fashionable of late, to decy vaccination and to claim that it is ineffective. It would be very easy for me to prove that this is not true, by citing voluminous statistics, but I think a single example will suffice. If it can be demonstrated that physicians and nurses in smallpox hospitals are protected by vaccination. This must be regarded as a crucial test; for, if these persons, living in the same atmosphere with scores or hundreds of smallpox patients, breathing in their exhalations are enabled to escape the infection, it certainly should be possible for others much less exposed to acquire similar immunity. In the municipal hospital of Philadelphia, during a period of 34 years, in which over 9,000 cases of smallpox had been treated, not a single physician, nurse or attendant who had been successfully vaccinated or revaccinated prior to going on duty, contracted the disease.

I have treated several hundred cases in the last ten or twelve years, being exposed to all conditions and forms of small pox, and my only preventive from contracting the disease was vaccination and repeated vaccination and the use of disinfectants.

Even after the patient dies of a communicable disease, there is a danger that he may infect others. For this reason, the public welfare requires a thorough supervision of the funerals of such persons on the part of the health authorities, who should adopt stringent regulations that tend to limit the danger connected with such interments. Generally the body is swathed in cloths, saturated with some powerful disinfectant, and the attendance of the public at these funerals is usually prohibited.

In this connection, I may be permitted to refer briefly to the incineration of the dead, which has become more and more popular, and is particularly advocated by scientists and physicians. For it has been shown that, in some instances, epidemics were produced by the disinterment of persons who had died of contagious and infectious diseases. When a corpse is totally destroyed, no matter whether the person has died of even so virulent disease as bubonic plague, all danger of communication of the malady to others is at an end.

In large cities, where new tenants are often unable to discover whether the premises they are about to live in is really in a sanitary condition, a thorough disinfection of a dwelling before it is occupied is advisable. For this purpose Formaldehyde and sulphur are especially of service, for they are both convenient and cheap. The latter affords the simplest contrivance on the market for producing sulpurous gas. They provide a safe means of thoroughly disinfecting rooms, closets, and other enclosed apartments, in which the gas can be confined long enough to destroy bacte-

ria. It is a well known fact that atmospheric moisture and warmth enhances to a very marked degree the germicidal power of Formaldehyde. The temperature of the air of the room to be disinfected should, therefore, not be below 65 degrees F., when its humidity is below 60 or 65 per cent. The length of exposure depends upon circumstances. Two hours under favorable conditions are usually sufficient. In a well closed room, a longer exposure may be of advantage, although I have arrived at the conclusion that any surface disinfection with Formaldehyde, the organisms are generally killed within the first hour of exposure, if they are destroyed at all.

Of course, in this somewhat rambling talk, I have been unable to dwell upon a number of the problems that confront the health authorities everywhere, such as the spread of tuberculosis, car disinfection, etc., but I believe that I have said enough to convince all of you of the great importance of public hygiene and of the necessity of aid in that good work by keeping one's own premises in a sanitary condition. If I have succeeded in convincing anyone who may have come here in a slightly skeptical frame of mind to that effect, I will have accomplished all that I set out to do.

Empyaema of Gall Bladder with Rupture: Report of Cases.*

By Dr. L. A. Crowell, Lincolnton, N. C.

The two principal etiological factors in the production of Empyæma of the gall bladder are stasis and infection.

Stasis acts as the predisposing factor, while infection acts as the exciting cause. The gall bladder like the appendix remains normal while there is no interference with its drainage. But so soon as stasis of its contents results, infection surely follows. Stasis is caused by obstruction to the outflow of bile from the gull bladder, the cause of which in the majority of cases is gall stone or stones lodged either in the cystic or common ducts. It may, however, be caused by kinking or twisting of ducts. Tumors may also interfere with the drainage.

After stasis is once established, the gall bladder becomes an easy prey to infection. Since the bacilli coli communis and the typhoid bacilli are the bacteria most frequently found in the gall bladder and in gall stones, the inference is that the gall bladder becomes infected from the intestinal canal. Bacteria enter the gall bladder from the intestinal canal by two ways: First and most frequently along the common duct from the duodenum. Second, by the blood current chiefly through the portal vein. These bacteria entering the gall bladder infect its contents. The bile is absorbed and in its stead we have a purilent fluid, constantly increasing in quautity, distending the gall bladder immensely in some cases. Cases have been reported where such gall bladders have extended down to the illiac crest. After this stage is reached, the disease may take one of two courses, viz:

The infected material may remain in the gall bladder until the bacteria die from the accumulation of their own products, the gall bladder dwindling away. Or, on the other hand the gall bladder may rupture, emptying its contents into the peritonael cavity, which was the result in the case I now report. The clinical history is purposely avoided in this paper.

Mrs. B., aged 81; patient had an operation for mastoid disease two years ago has not felt well for past several months. Wednesday, April 20th, patient began to complain of severe pain in epigastric and right hypochondriac regions which simple remedies failed to relieve. Dr. Wright was called and found patient with temperature of 101° —pulse 92 and complaining very much with pain in abdomen. Physical examination at this time revealed the presence of a very sensitive tumor mass in region of gall bladder. Diagnosis of gall bladder tumor was made. He advised her to see me at once and have an exploratory laparotomy done. Upon seeing patient on Friday, I found her temperature 101°, pulse 92 and much pain in region of gall bladder where I discovered a sensitive globular mass apparently as large as two fists. Saturday, no change in condition when I ordered her removal to hospital and prepared for operation Sunday morning. At 7 p. m. on day of admission, temperature 101 1-2°, pulse 89. At 8 o'clock patient was apparently comfortable and turned to right side and slept for an hour when she awoke screaming with intense pain in abdomen. I saw her immediately, and upon examination discovered that mass above described had disappeared. Abdomen was greatly distended and as rigid as a board. In additian to the severe pain in the abdomen, she had a constant desire to urinate, which is a symptom frequently found in cases of acute perforative peritonitis. I have seen several cases of ruptured appendicular abscess who have suffered intensely with dysuria. Indeed, I had one patient, a young man who had an immense appendicular abscess which ruptured just an hour after his admission, this was the only pain of which he complained. Although his abdomen was very much distended and very rigid.

*Read before the Seventh District Medical Society of North Carolina, Charlotte, N. C., December 6, 1910.

Patient's temperature was taken soon after this pain came on and was found to be 97, while the pulse had increased from 80 to 104. These symptoms assured me that I had a case of empyemia of gall bladder which had ruptured and discharged its contents into the peritoneal cavity. I realized the fact that unless prompt action was taken the time for surgical operation would have passed. Preparations were made for immediate operation, which was begun at 10:15 p. m. Drs. Wright and Hoover assisting. The usual incision was made and when the peritonium was opened a quantity of tubid fluid escaped.

The gall bladder was found to be considerably larger than normal and was dark gray color, differing from the normal gall bladder which is always clear blue. A more thorough inspection disclosed the presence of a perforation on its posterior surface midway between fundus and the beginning of the cystic duct large enough to admit the tip of the index finger. The gall bladder was brought forward into the incision and an opening large enough to admit two fingers was made in the fundus. Two small stones, a quantity of pus and a clot of blood shaped like a spinning top but smaller were found. The mucous membrane of gall bladder was covered with a white exudate and beginning necrosis of its wall was evident at several points. Indeed it was so greatly diseased that I did not consider it good surgery to attempt to save it, notwithstancing the fact that it was night and my patient 81 years of age.

Before beginning the removal of the gall bladder, cystic, common and hepatic ducts were examined and found to be clear. Removal of gall bladder was made from below up. After removing gall bladder I anchored a tube drain in cystic duct and placed several flat cigarette drains around the tube drain and closed abdominal wall up to drains. I also put in a suprapubic drain which was pushed well down in pelvis this drain was removed after twenty-four hours. Patient was put to bed and Fowler- Murphy treatment directed. Bile began to discharge from wound on fifth day, tube came away on eight day. Patient had an uninterrupted convalescence, was able to sit up in bed on eight day and left hospital at the end of the fourth week entirely well.

This caae proved to be an interesting one for the following reasons, first, on account of the age of the patient, second, because of the fact that we here had a case of empyæmia of the bladder which was immenselty, distended to the extent that it caused its rupture, although we could find no obstrution in any of the ducts either by stone, kinking or twisting. It also proves to us the importance of immediate surgical intervention in all cases of ruptured or perforated visera, irrespective of the cause.

This case furnishes additional evidence to me that choleocystectomy is no more serious operation than choleocystotomy and I shall make it the rule in the future when in doubt to remove rather than drain the gall bladder. The result has been in those cases in which I have removed the gall bladder, that the patients have had a more rapid convalescence, suffered less from post operative pain and on the whole have done much better than those cases I have drained.

The Throat Specialist and Preventative Medicine.*

By Thos. W. Davis, M. D., Winston-Salem, N. C.

By preventative medicine is meant any means use to prevent the occurrence of disease. In the accomplishment of this, the practice of medicine reaches its climax, winning a fight with no scars of the battle field to mar the victory. The feature of protection and safety for that which we value is an appealing one in every phase of life, and nowhere is there such beautiful economy as that which spares the human race disease. There is an ever increasing halo around the names of such men as Jenner, Pasteur, Lister Koch. We see no end yet to the achievements that have their origin and impetus in the principles evolved by such men. Such lights force their impress upon all men. However, without referring to great things, there is a class of work for the prevention of disease being done in a quiet and limited way daily, which has not been given due importance by the men doing it, nor has it had the proper recognition from the medical profession or the laity for its prophylactic value. Therefore its full scope of usefulness has not been realized. I refer to the prophylactic feature of the work of the throat specialist. At present he has little opportunity to emphasize this feature, for he is rarely consulted until existing conditions or disease become so troublesome that the consultation is forced.

I class pathological conditions about the throat and their effects as strong predisposing factors in the cause of all air born diseases; notably diptheria, scarlet fever, staphylococic and streptococic infections, influenza, bronchitis, broncho and lobar pneumonia, tuberculosis.

Note the preference that the diptheritic

*Read before the Forsyth County Medical Society, April, 1910.

lesion has for the faucial region. The same of scarlatina with its early throat manifestation and cervical adenitis pointing undoubtedly to this locality as the point of entrance of the disease. My observation in general practice covering a period of eight years was that in these diseases there was usually a pre-existing pathological condition about the fauces.

It is interesting to note and probably significent that those diseases peculiar to to early life are co-incident with a period in which pathological changes in the throat are most pronounced. Changes which result chiefly from irritation and repeated attacks of inflammation. Now the question is, to what extent do these changes influence the susceptibility of the individual to contagious and infectious diseases. They must act by lowering body vitality or focal resistance, or both.

The character of lesions with which the throat specialist has to deal, are classed under two main heads, (1) those of infection, (2) those of obstruction. These are often blended and likewise their evil consequences.

As to parts affected we would consider first, The FAUCIAL TONSIL.

Anatomically the faucial tonsils are situated one on either side of the fauces between the anterior and posterior pillars of of the soft palate, and present on each surface the mouths of eight to twenty crypts. Their position in relation to the entrance to larnx, and oesophagus is significant and suggests a striking analogy to the fortifications guarding the entrance to a harbor.

The histolical makeup (lymphoid) of the tonsil suggests its function as a protector against microbic invasion. From the continuous production in this tissue of lymphocytes, are provided white corpuscles for phagocytic action, and whether this action takes place in the tonsils or not, their proximity to, and probably safe guard at the entrance of the larynx and oesophagus must be recognized as significant. Often susceptible children (and a happy choice between two evils,) tubercular infection is diverted from larynx and lungs and carried to the deep cervical glands through the lymphatics leading from the tonsil. Cervical adenitis in scarlatina argues that the point of entrance of the disease is the tonsil and there is no doubt that here under normal conditions of tonsil and body vitality the infection is often overpowered, there resulting simply an acute tonsilitis, which Coakley mentions as coming from certain contagious diseases, especially scarlet fever and diptheria.

It is my conviction that every organ of the body in health, has its necessary function. and should be preserved so long as it has not through pathological process, become a nuisance to the body welfare. It is not always an easy matter to say how much functionating power a diseased tonsil has left, and whether or not the good of such, with the promise of improvement by treatment, will overbalance the possibility of harm to come from allowing an unhealthy organ to remain. However, from hypertrophy alone, the obstructive symptoms may make tonsillectomy necessary. A simplehypertrophy of the tonsils up to date of puberty or early maturity, with a following decrease in size, maybe looked upon as a natural process.

The pathological hypertrophy of the tonsil is that of an increase, either in the glandular element or its replacement with fibrous tissue. The former is evidence rather of continued irratation, and does not so often show infection, while the latter is an evidence of recurrent attacks of inflamation, and is apt to be the seat of hidden areas of streptacocal or staphylococal infection, with a massing together of tonsil and pillars. This is the kind of tonsil that is especially detrimental to the health of the owner. There is more or less continuous absorption from the infected area, and a consequent undermining of the body strength. If it is at this advanced stage of the pathological process that the throat specialist is consulted, to do a tonsilleotomy is certainly an act in the interest of preventive medicine. Equally so, and much better practice, if he has the opportunity of advising early in the course of the infection, and of saving healthy tonsils.

It is much too common for the family physician and parents to look upon recurring colds and sore throats in children as a matter of course, and to pay no special attention to the treatment of the throat until obstructive symptoms, and symptoms referable to the ear make it imperative. The object should be to allow no infected areas, or results of the early infections to remain. This to be guarded against by careful local treatment during and following an infection, and the consideration of the factors which make these infections prevalent. And they are getting to be very prevalent, so much so that the laity is constantly putting the question; Why is there so much trouble with, and from children's throats these day.? In answer, as factors in the order of their importance, I would put the following: First, mouth breathing; second, Carious teeth and infected gums and alveoli; third, sleeping in a viciated atmosphere; fourth, improper dictary.

The professfon could well afford, in keeping with its magnanimous endeavors in the

interest of preventative medicine, to emphasize these four points with health boards, school boards, asylums, parents, and in every avenue reaching the life of the child. A case in point, recently seen by myself, adds conviction to my mind that proper attention given to these matters gives to the child a great measure of immunity, or non-susceptibility to infections. It was a case of streptococal infection of the throat (an infection characteristically epidemic at times,) in the mother of two children ages two and four, in which isolation was next to impossible, and the childen were continuously exposed to the infection for the period of activiiy of the mother's sickness. Neither child was infected. The infection of the throat of the mother spread with area of liquifactive necrosis from one tonsil to the other and then to the pharynx wall and naso-pharynx, during which time the systemic disturbance was marked. In reference to the children, they have been cared for as follows: Adenoids were removed for both, the youngest at the age of six months just as soon as there was evidence of interferrence with normal nasal breathing. The gums and teeth have been cleaned daily and a simple alkaline antiseptic solution used for the mouth. The teeth of the older child are examined at regular intervals by a dentist for the purpose of allowing no carious area to exist for any length of time. Both children have always slept in a room with at least one window open wide, and have never been allowed trashy or unwholesome food. The tonsils of these children show some hypertrophy, but no evidence of infection and there has never been any sore throat, or throat infection either. The parents already feel rewarded for their effort in giving the attention above mentioned, and I think may confidently feel that there will be a decided element of safety for these children when exposed to various infections, as they surely will be, especially at school. The good too, will not only be for childhood, but the strength of normal tissue about the throat will manifest itself throughout life. These measures are within the having of all, and we, as a branch of the profession, confining our work to the throat, should herald their importance.

Regarding parts affected, in relation to the cause of disease, I will mention in the second place pathological conditions of Nose and naso-pharynx.

Nearly all of the evil consequences referable to this locality are based upon obstruction and interference with the functioh of the nose. Barring the narrowing of the palatal arch, and the deficiencies of congenital syphilis, it is rare to find a factor, per se, in the nose in early life. It is true we find altered conditions of the mucous membrane, being continuous with, and a part of an unhealthy condition in the naso-pharynx. The hpertrophied tissue there in naso-parynx offers a splendid nidus for germ life, and it is from this point that an extension so frequently manifests itselfs in an active way in the middle ear. The early operation for adenoids is not often enough done to prevent the occurrence of middle ear inflammation.

The hypertrophy of Luschka's tonsils making a mass of adenoid vegetations is more common at birth than is thought. My attention has been attracted by the frequency of its manifestations during the first year of life, and just so soon may be expected the evil consequences of the mouth breathing, which by departure from the normal in amount and character of air respired predisposes the individual to infectious diseases, in the following manner: First, there being a limited amount of air taken into the lungs, there is a resulting lack of nutrition and lowering of the body resistance. Second; the cold, dry, unsifted air is a source of constant mechanical irritation to the mucous surface of throat and upper respiratory tract. The result is congestion and tissue change, by which a weakened tissue replaces the normal. This irritation, I think, is often the sole cause of false croup and bronchitis. Third, germ life has the opportunity of direct entrance into the respiratory track. Fourth, to adenoids and mouth breathing, I attribute largely the frequency of streptococal and staphylococal infections in the faucial region. The result ot these repeated infections means disease and loss of function of the faucial tonsils, which condition as before pointed out, favors microbic invasion. A man prominent in throat work, recently stated to me that whenever the tonsil condition demanded operation he never felt that it was necessary to examine the post nasal space, being sure that adenoid vegetations were there. I feel sure that their existence preceeds disease of the tonsil and that they are the prime offenders. Therefore, the necessity for their removal early in life, and of keeping the post nasal space clear.

It has not been my intention, in this paper, to mention any of the preventative features of the more unusual work of the throat specialist, such as accessory nasal sinus work to prevent intracranial infection, or the early treatment of primary tubercucular lesions about the throat. It has been more my purpose to emphasize the fact that the throat condition is a most important one as affecting the occurrence of acute conta-

gious and infectious diseases, and that in should have proper consideration during the early life of the individual. The points for emphasis are briefly summarized as follows:

(1) That due importance by the throat specialist is not given to the prophylatic feature of throat work in the early life of the individual and that therefore it has not the proper recognition from the profession as a whole, and the laity.

(2) The pathological processes about the throat and their effects are strong predisposing factors in the cause of all the air born diseases; notably diptheria, scarlet fever, staphylocicic and streptococic infection, influenza, bronchitis, broncho and lobar pneumonia; tuberculosis

(3) That adenoid tissue in the nasopharynx as responsible for mouth breathing is a prime factor in the inception of contagious and infectious diseases and in the making of pathologic conditions in the faucial region.

(4) That the examination for, and removal of adenoid tissue during the first year of life is an important preventative measure.

(5) That an endeavor should be made to preserve the faucial tonsil in its normal state for its functionating power as a protector against microbic invasion. This by thorough local treatment for each infection and a consideration of the factors affecting its health as next mentioned.

(6) That in keeping with its endeavors in the interest of preventative medicine it is the duty of the medical profession to emphasize before health boards, school boards, asylums, parents, and in every avenue reaching the life of the child, the importance of the following simple measures:

(a) Of providing prompt correction for mouth breathing, (in infancy if it exists.)

(b) Of giving daily care to the teeth and gums and the daily use of the proper antiseptic mouth wash.

(c) Of having an abundance of outside air in sleeping room regardless of the season and age of individual.

(d) Of allowing no trashy or unwholesome food, such as children are prone to form the habit of eating.

The Roentgen Ray in the Early Diagnosis of Pulmonary Tuberculosis

By Daniel D. Talley, Jr., B. A., M. D., Roentgenologist to the Johnston-Willis Sanatorium Richmond, Virginia.

Without doubt one of the greatest essentials in the successful treatment of pulmonary tuberculosis is its early diagnosis, and modern methods have done much toward aiding us in recognizing the condition before it becomes incurable. How soon are we able to tell the patient that he or she has tuberculosis of the lungs? Up to a short time ago it was thought necessary to find the bacilli in the sputum before the diagnosis could be firmly established, but we now know that often the case is well beyond incipiency before the germs can be demonstrated. The tuberculin test, while very valuable if negative, has not fulfilled all its early claims in the positive cases.

In the hands of the expert, physical signs will sometimes establish the diagnosis in incipiency, but we believe that they are often unreliable, for the reason that a vast majority of the cases have their earliest lesions at the root of the lung or closely adjacent thereto, rather than at the periphery. The observer will obtain no abnormal signs through the healthy tissue overlying these diseased areas until the condition has made definite progress.

The clinical picture which the patient presents is often of great value. According to Flick, the subjective and objective symptoms which may be present with varying intensity are as follows: Loss of appetite, a feeling of malaise, especially in the forenoon, an occasional cough, hypersecretion of mucus in the respiratory tract, sometimes headache in the afternoon, and occasionally a hypersensitiveness of the entire nervous system. In our cases gastric disturbances have not been uncommon. One may find that the temperature, if taken at short intervals, reaches a point between 99° and 100° at some period of the day, a pulse above normal, and a single or double pupillary dilatation. Another feature which should be mentioned is that the blood examination will usually show the total number of leucocytes to be below normal, with a relatively large lymphocyte count. In a word, if a person is in ill health at all, if he deviates from the normal in weight, color, or strength, or in physiological functions, tuberculosis should be looked for.

It is our purpose in this paper to demonstrate the powers of the Roentgen Ray in making positive the diagnosis of these early cases, in that it will point out the presence of lesions which cannot be positively located by any other method. These are the lesions which are found at or near the root of the lung, and also those which, although anatomically accessible to the physical methods, do not give out physical signs in proportion to the amount of tissue involvent present. More will be said later on concerning this latter point.

*Read at the forty-first annual session of the Medical Society of Virginia, held at Norfolk, October, 1910.

We believe that sufficient emphasis has not been laid upon the early involvement of the tracheal and peri-bronchial glands, that some of these glands are diseased in practically all cases, and that their involvement, if not previous to any lesion of the lung tissue proper, certainly bears a very close relation thereto. Furthermore we are reasonable sure that only a very few cases have their true beginning at the extreme apex of the lung. Although these beliefs are based largely upon radiographic evidence, both from the observations of many who are pioneers in this work and from my own observations in a considerable number of cases, a careful search of the literature reveals many proofs of these points. We deem it not out of place to present some of this evidence.

It has been conclusively proven by competent observers that the spread of the disease takes place along the lymphatic channels, and from foci thus deposited directly into the tissues themselves. In the case of the lungs the bacilli are taken in along with the inspired air, deposited upon the mucosa of the terminal or other portions of the bronchial tract, and thence carried beneath the surface. Here they may produce a focus of disease or be carried by the lymphatics to the glands which drain the invaded areas, producing a characteristic lesion in these glands.

Tendeloo, of Leyden, states that it has been for a long time accepted that tuberculosis begins at the apex of the lung, but that this is an error which has caused much confusion; it may begin here, but by far the most frequent situation is a point lower down, between the hilus and the apex. Many observations support this statement, and the reason for it is most probably that the respiratory movements of the lymph are slighter in the central than in the peripheral portion of the lung, hence the opportunity for the arrest and development of the tubercles in the former situation is greater. Reliable autopsy reports bear out the truth of these beliefs. Adami and McCrae in a large series of one thousand autopsies found positive evidence of pulmonary tuberculosis in four hundred and seventeen. In these the thoracic nodes were found involved in a large per cent of cases, and the authors state that the percentage would undoubtedly be much larger were it not for the fact that not as much attention was paid to the point in the first portion as in the latter part of the series. MacCallum states that the lesions produced in these glands are not always the same, and that these differences have led to many difficulties on the part of the pathologists in interpreting them. In the above series there was a large percentage where the apex was not involved at all.

The use of the fluoroscope is advocated by many authorities in lung work The majority of these, however, admit that much more detail can be obtained on the radiograph and earlier lesions recognized. We would consider the fluoroscope to be useful to the clinician somewhat practiced in its use for noting the progress of his cases and confirming his physical findings, while the making and interpreting of the radiograph should be confined to the roentgenologist, and is vastly more valuab'e in actually establishing the diagnosis. The danger of the fluoroscope is a strong argument against its constant use by any one.

It is not our purpose to describe the technique of making radiographs of the chest, except to say that for correct interpretation it is necessary to make the exposure during suspended respiration, in order to obtain distinct detail of the structure examined. This has been made possible by improved apparatus so that with the proper machine and technique an exposure of a few seconds is now no very difficult matter, some operators maintaining that the radiograph should be made instantaneously in order to eliminate the movement caused by the heart and great vessels.

Stereoscopic radiography has recently gained many advocates, as in this way we get a "relief" effect and individual structures are more clearly defined. It is unnecessary to state that a certain familiarity with the normal appearance is necessary, and that considerable experience in the interpretation of lung negatives must be gained before one can be confident in making a diagnosis from the radiograph. The claims of some whose apparatus has been poor and whose experience has been slight have done much to discredit the method.

As to the evidence which may be depicted on the radiograph in incipient tuberculosis, perhaps the most important is the shadow of the individual tubercles. These shadows may vary in size from a pin head to a large pea. They may have sharp clear cut edges, or the periphery may have a hazy appearance. Where several tubercles have softened and united we have the shadow of the conglomerate tubercle, which gives a very typical mottled appearance. In a subsiding or latent process these tubercles may have gone on to calcification, in which case there is a dense, well defined shadow. A number of these latter elements, without other signs, indicate a process which has been successfully overcome. Complete consolidation gives a dense homogeneous shadow, while in a process which has gone on to cavity formation the

outlines of the cavity will be indicated by a more or less dense shadow, surrounding a clear space.

The appearance at the root of the lungs is valuable. Normally there is a slight shadow here, due most probable to the origin of the bronchial tree. In the diseased lung, these shadows are much increased, due to the peribronchial adenitis, and we may be able to distinguish individual tubercles. The peribronchial thickening may extend to the smaller bronchi causing a fibrous appearance. This appearance may connect areas of localized disease. In a large number of cases there seems to be an intimate relation between the thickening at the root and the diseased lung tissue.

Other minor signs which may aid us in making a diagnosis are the calcified first rib cartilage (a very common phenomenon), retracted diaphragm, areas of diminished aeration, and the vertical position of the heart. (Hickey's Sign.)

Much valuable work has been done in some of the larger cities in the way of comparing the results of the clinician with those of the radiographer, but with a view to satisfying ourselves as to the value of the radiographic examination compared with skilled clinical methods it was determined to obtain, if possible a series of cases upon which such methods had been used. It was our good fortune to procure quite a large series from the practice of Drs. Douglas, VanderHoof, and McCaw Tompkins. These cases had been thoroughly examined without positively establishing the presence of tubercular involvement. In some of them there were fairly definite physical signs, but in the majority the signs were indefinite or lacking. The radiographic examination was made entirely independent of the physical examination, and it was not until after the skiagraph had been studied and our report submitted that we inquired concerning the presence of suspicious areas. This was done in order that our opinion might not be biased in any way, however unconsciously. We were able to demonstrate in some cases well marked lesions under the exact points on the chest where suspicious signs had existed, and where these signs were difinite it was usually the case that the diseased area was found to be greater than was suspected. Undoubted disease was located in several cases where no signs were present.

In connection with the above cases, we would like to mention certain facts which have been well pointed out by Cole of New York. He states that the signs upon which the diagnosis of early tuberculosis is based, such as localized rales or clicks, are not the physical signs of tuberculous infiltration or consolidation but those of a localized bronchitis which may or may not be tuberculous, and that on the other hand this bronchitis may be absent until the disease has passed into the stage of infiltration and consolidation, when pathologically and radiographically it can no longer be considered incipient. These facts, in addition to that pointed out above concerning the frequent origin near the root of the lung, easily explains the failure of physical signs to depict the true state of affairs in all cases.

It is sometimes difficult, even though definite radiographic evidence may be present, to determine whether the disease is active or latent. Here we must be guided by the amount of calcification present in the tubercles, together with a certain fibrous apperance sometimes shown; also, if no physical signs be present, upon the clinical symptoms, paying particular attention to the afternoon temperature. The radiographic examination should always be made in conjunction with rather, than to the exclusion of other methods.

We think it justifiable to draw the following conclusions as to the value of the X-ray in incipient tuberculosis:

First, that in most cases it will positively establish the diagnosis earlier than any other method.

Second, that it will correctly portray the amount of involvement present and to a certain extent the amount of resistance which the patient possesses, thus constituting a valuable aid to prognosis and treatment. 118 E. Franklin St., Richmond, Virginia.

The Need of Care in Amputation of the Uterine Cervix; Report of Two Cases of Subsequent Cancer.

Read by Harlan Shoemaker, A. B., M. D.
Shelby, N. C.

Recent developments in research medicine directed toward the solution of the cause of cancer, tend to show more and more conclusively that this affection is a well localized one at first, and that it remains localized for a considerable period of time.

Several simple experiments which might be performed by any one of you, are very demonstrative of the specific nature of the local infection. First, cancer is easily transplanted from one animal to another—only the elementary principles of surgical asepsis need be observed. Second, the transplanted tissued if heated to no more

*Read before the Seventh District Medical Association, of North Carolina, Charlotte, N. C., Dec. 6th, 1910.

than 44 degrees Centigrade, or 109½ degrees Fahrenheit, loses its power of growth, but still retains its power of producing immunity against subsequent inoculations of fresh living cancer tissue. To be more specific, if a small piece of freshly excised cancer material which has been heated one hour to 109½ degrees Fahrenheit, be introduced beneath the skin of a Japanese waltzing mouse, this animal immediately increases its resistance to the introduction of fresh cancer material which has not been heated. Third, the tendency of cancer tissue is to grow more rapably when disturbed.

These experiments are not theories, but facts, which have been worked out through the use of innumerable animals for laboratory experimentation. No doubt the one fact that must stand out in your minds at once is, how very nearly Nature eradicates cancer from the host when the tumor becomes broken down and invaded by secondary micro organisms. The temperature ranges high at times, though not quite to 110 degrees Fahrenheit. I am sure that there are several men present who have witnessed high temperature with recovery.

Dr. Coco, of the Philippine Islands. has gone so far in the matter of treatment against cancer, as to use the macerated cancer tissue for an injection against the possible recurrence of this disease. His results have been relatively fair. The principal difficulty which he was unable to overcome in every case has been the liability to abscess formation at the point of injection.

I have recalled these fundamental facts to you in order to impress the need of great care in the handling of cancer cases. This advice is most urgent, especially in diseases of the uterine cervix. Here one is liable to overlook, or even forget the possibilities of cancer of the body of the uterus, in the one desire to treat an apparently localized affection. We certainly owe it to ourselves and to our patients to make a diagnosis.

The early diagnosis of cancer may not always be so easy, even with the best of laboratory facilities at one's back, and I take it that every physician in the world has just such facilities. There is not the slightest possible excuse for any practitioner who avails himself of his opportunities, not to know absolutely, so far as it is possible for human science to demonstrate, what he is handling.

In sending tissue to a laboratory of a medical school, or to the city or the state laboratory for diagnosis, certainly some selection of material should be made. In order to make a selection of material when a whole specimen cannot be sent, the tissue scraped, or excised, should be recovered from the most suspicious areas. Within the uterus the scrapings from the area which has the hardest or the most gritty feel, should be handled apart in a separate vial of 80% alcohol. Of course this eliminates the use of a fountain syringe as a curette. In forwarding such a specimen, the physician should label "Urgent" in order that as early a report as possible might be received.

Tuberculosis and fibroids must be differentiated from uterine and cervical cancer. I have here a photograph of a uterus which was completely removed, and which failed to show cancer in any one of the selected blocks taken for examination, However, a small pedunculated fibroid which shows in the fundus, apparently produced all of the symptoms which appearing at the proper time of life, were mistaken for a cancerous hemorrhage.

Tuberculosis of the cervix may present a very difficult diagnosis in the early stage. The presence of out-lying, or daughter tubercles, may aid in solution of the problem, but a small piece of tissue excised and sent to the nearest pathologist. will do more.

Erosions of the cervix may or may not be due to cancer, or they may later undergo cancerous degeneration.

Case 1. White, female, age 36, married, had borne children. Cervix hardened, everted and eroded. Operation, amputation of cervix and curretment; microscopical diagnosis. Hyalina degeneration of cervical tissue. No evidence of cancer cells in cervical tissue or uterine scrapings. Eight months subsequent to operation well developed cancer tissue was evident on the stump of the cervix. Case 1. shows an unsuccessful attempt to arrive at a diagnosis. It also illustrated how easily the cancer growth can be stimulated by mechanical interference.

Case 2. White, female, age 41, married, had born children. Three years prior had cervix amputated. Recent examination revealed many cancer nodules studded over cervical stump and vaginal vault. Refused radical or palliative operation. case 2, demonstrates an utter disregard of the possibilities of the cause of an eroded cervix. This failure to make a thorough search for the exciting cause of the erosion means a prolonged state of misery and an agonizing death.

The treatment of patients in whom the cancerous changes of the uterus or cervix is but slightly advanced, calls for radical operation as described by Wertheim.

In the more advanced class of cases where the cancerous changes have invaded

the cervix to such an extent that a radical operation would fail to remove all cancerous tissue, several methods are available. The oldest and most abused is a curretment followed by the use of caustics to control hemorrhage. Next, and about as fallible, is the x-ray and other electrical treatment. The best result to be expected in these cases is an amelioration of the symptoms, during a prolonged period.

The invasion of the tissue by cancer cells can best be controlled and in rare instaces stopped, by cutting off the blood supply. Two things are to be gained by this procedure, one is the starvation of the cancer cells in the hope that they will undego some favorable degeneration such as a colloid change; the other is the saving of the loss of blood to the patient throughthe friable cancer tissue. The operation can be performed under local or general anæsthesia and by ligature or by clamping the cervical arteries. Clamping of the cervical arteries is much the easier operation. It is not attended with the profuse hemorrhage of curretment and if performed under the local anæsthesia, produces very little mental shock in the patient. I can recommend the technique employed by Henrich, in Freund's clinic at Strassburg, with the local anæsthetic of

Beta eucain	1.0	part
Sodium Chloride	0.6	"
Adrenal (1-1000)	8.	"
Water	100.	"

to be injected into the cervix at four points, using 1 to 2 cc. The cervix is rendered insensible to pain and permits any manipulation.

Personally, I believe that the uterine cervix should not be touched uuless the operator has taken every precaution to eliminate cancer of the uterus, and then only when the diseased condition is producing reflex nervous irritation in the patient, otherwise, the surgeon should be prepared to perform a radical operation should the occasion demand it.

The Amebic Dysentery Problem in North Carolina.

Read by W. Allan, M. D., Charlotte N. C.

The ameba, first described by Lambl(1) of Prague, in 1859, and reported in the stools in cases of cholera in India in 1870, by Cunningham and Lewis (2), was definitely assigned an etiologic role in dysentery, in 1875 by Loesch, (3) working in St. Petersburg. These observations were soon confirmed by Grassi, (4) Callandrucio (5) and others; in 1883, Koch, (6) in Egypt, demonstrated amebae in sections from dysentric intestines. Kartulis, (7) likewise working in Egypt in 1886, reported (8) 150 cases, and may be said to have fairly established amebic dysentery as a distinct disease both clinically and etiologically. In 1891 Councilman and Lafleur, (9) at Johns Hopkins, published a description of the pathology of amebiasis to which nothing has since been added.

The finding of amebae in the stools of healthy persons by Grassi, (10) in 1888, and later by Schuberg,(11) Grasser, (12) and Schaudinn, (13)at once raised the question of the identity of the various organisms described. During the '90's various species of amebae were described and numerous classifications made by Quinke and Ross, (14) by Celli and Fiocca, (15) by Kruse and Pasquale, (16) and by others; these classifications however were based solely on the morphology of the organisms observed, as at that time nothing was known of the life cycle of the ameba.

Cassigrandi and Barbagallo (17) in 1897 were the first to describe any of the reproductive phases of the ameba and to establish the genus Entameba: in 1903 their work was confirmed and extended by Schaudinn, (18) who called attention to the fact that a protozoon could be defintly classified only when its complete life cycle was known.

Schaudinn's work naturally led to renewed efforts to cultivate the ameba artificially, so that the complete life cycle might be followed out. Before this time cultivation of the ameba had been only partially successful and without any very definite results in the matter of a proper classification; the next year however saw the publication of the excellent work of Musgrave and Clegg, (19) who cultivated amebae from the stools of dysenterics and from the water suppiy in Manila. In 1905 Lesage (20), and in 1908 both Noc, (21) and Walker, (22) reported their thorough studies on the artificial cultivation of amebae.

In the main Schaudinn's work has been confirmed, notably by Craig, (23) and his classification of the parastic amebae of man as Entameba histolytica, pathogenic, and E. coli, non-pathogenic, has been pretty generally adopted. The recent work of Viereck (24) of Lesage (25) and of Noc (26) on various new species of the genus Entameba awaits confirmation. Walker's recent denial of the correctness of Schaudinn's views hardly deserves consideration as his only specimens of E. histolytic awere from an old culture sent from Manila.

In North Carolina then we doubtless have both E. histolytica and E. coli, and probably still other species of the genus Entameba; the speaker is of the opinion that he has stained specimens of two distinct species of pathogenic Entamebae,

but of course this can be proved only by following out the complete life cycle of each.

Some idea of the prevalence of amebae in the stools in this locality, can be obtained from the following statistics:—

The speaker during the past 6 months has examined the stools of 200 individuals in two orphan asylums and one school in Charlotte; in 51 instances the examination was preceded by a saline cathartic; in 149 instances the stools were spontaneous; 45 or 88% of those to whom a cathartic had been administered showed amebae, while 51, or 34% of those presenting spotaneous stools showed amebae. Taking both classes together, 96 out of 200 individuals showed amebae in their stools.

It has been impossible to stain up amebae from any large number of this series, nor has it as yet been determined accurately what per cent. of these ameba carriers have had any symptoms; a few had bloody dysentary, and a large majority of them suffered fron malnutrition, anemia, and occasional diarrhea.

The pathology and the clinicial picture of the typical case of amebic infection with bloody dysentery needs no repitition. But the fact should be emphasized that from one half to two thirds of those actually suffering from amebiasis have no dysentery, or they may be constipated.

About 90% of this class of cases is diagnosed and treated as chronic malaria; others are treated for appendicitis, gall stones, torpid liver, gastric ulcer, nervous dyspepsia, intestinal indigestion, neurasthenia, uterine displacements, pernicious anemia, hook-worm, pellagra, and tuberculosis. Let us see briefly why such a variety of diagnoses are possible in the absence ot an examination of the feces.

1. There is almost always a secondary anemia, causing pale mucous membranes, a muddy, sallow skin, chronic nasal catarrh, leucorrhea, headache, pain in the limbs (particularly in the calves of the legs) sub-normal weight, mental and muscular debility and possible relaxation of the uterine ligaments—hence the diagnoses of anemia, hook.worm, chronic malaria, and uterine displacements.

2. Some amebics run at times a low intermittant temperature, possibly due to secondary infection of the intestinal ulcers—hence the diagnoses of malaria, chronic appendicitis, and tuberculosis.

3. The tongue is generally coated, but at times it is dry, bald and cracked, and the corners of the mouth are eroded as in pellagra;(it may be said) in passing that in this locality pellagra is generally preceded and complicated by amebic infection.

4. The stomach and intestinal symptoms may be acid eructions, a feeling of heaviness and discomfort after meals (often growing worse toward night,) flatulence, pain or soreness over any part of the large intestine (this may be over appendix, gall bladder, or stomach)—hence the diagnoses of appendicitis or gall stones when fever is present, and of gastric ulcer, torpid liver, nervous dyspepsia, or intestinal indigestion in aferbrile cases.

5. Amebics who work strenuously in spite of poor assimulation of food may show restlessness, irritability, insomnia, exaggerated reflexes, and other hypochondriacial symptoms and are often classed as neurasthenics.

The differential diagnosis consists in examing the feces.

Of course amebae may be present only as a complication, or they may not be responsible for any of the symptoms at all, for the examination of the feces is only one step in working up a case and can never be interpreted alone; but in Carolina no examination is complete until the feces have been examined as carefully as the chest, or as the blood and urine.

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Gastric Ulcer in Children.*

By W. O. Nisbet, M. D., Charlotte, N. C.

Authorities on diseases of children are agreed that gastric ulcer is seldom found in infancy and early childhood. Of fourteen authors consulted, eight state that gastric ulceration is very rare in children, while the remaining six do not even mention the subject. Holt considers this matter under the following headings:

First, ulcer in the new-born.
Second, ulcers from follicular gastritis.
Third, tubercular ulcers.
Fourth, round, perforating ulcers.

In the latter he considers the pathology the same as in adults.

In medical literature up to 1900 there were on record only three cases of peptic ulcer in children, as follows:

First, a child, three and one-half years old, as reported by Reiner, which showed bloody vomit and stool several days before death by perforation.

Second, by Colgan, a case two and one-half years, which gave no symptoms until twelve hours before death, when perforation occurred

Holt also states that the characteristic symptoms of perforated gastric ulcer in children, are, gastric pain and tenderness, vomiting of blood, bloody stools and marked prostration. He also mentions the fact that gastric hemorrhage in children may occur in purpura. hemophilia, scurvey and rarely in malaria and gastro-enteritis

It is the purpose of this paper to discuss only that type of ulcer in which the symptoms point to simple peptic ulceration. It may be of interest to consider for a moment why gastric ulcer is uncommon in childhood. I think the explanation possibly lies in the fact that for the first twelve to eighteen months of its life the child subsists on milk, the blandest and best acid-combining food, and hence the stomach mucosa is thereby protected from irritation. Furthermore from the second to tenth year, milk is one of the chief elements of diet.

I would not have you infer from the foregoing statements that peptic ulcer is caused solely by food-irritation or by excessive hydrochloric acidity or by the special action of micro organisms, or from a pre-existing anæmia, for I think it more likely that the ulceration is the resulant of the action of one or more of these factors

My experience in gastric ulcer of children is limited to four cases, the clinical history of which is as follows:

Case one: M. W., age eight years, parents healthy, and family history clear as to tuberculosis. Parents stated that patient had suffered from impaired digestion for two years; that acid foods disagreed and that acid eructations were common, and that relief was obtained by taking bicarbonate of soda; that there had been four or five attacks, with pain, nausea, epigastric tenderness and vomiting and that there was an associated bronchial cough, and that the attacks lasted from a week to ten days; after these attacks there would come a period of improvement, and later there would recur the digestive discomfort after meals and that these symptoms would sooner or later culminate in one of the acute exacerbations as related above.

Physical examination showed patient fairly well nourished yet slightly anæmic. Heart normal, slight bronchitis of the streptococcic type, as shown by microscopic examination of sputum. Liver and splenic outlines normal; circumscribed tender point to the right of the mid-epigastric line and painful point in the back to the right of the twelfth dorsal vertebra. When first seen in consultation with Dr. P. M. King, of this city, patient had just vomited two drachms of bright red blood and was about complaining of pain located about two inches below and one inch to the right of the ensi-form process. Parents were advised that condition was that of gastric ulcer and next morning patient was removed to hospital. Treatment consisted in hypodermics of one-sixteenth grain morphine and one six-hundredth grain atropine every eight hours, ice-bag to epigastrium, complete rest in bed, rectal feeding every eight hours for ten days, then milk and lime-water by mouth for three weeks. Patient vomited a small amount of blood on the third day, after which there was no recurrence of hemorrhage. Patient was given semi-solid food at the end of the fourth

*Read before the Seventh District Medical Society, of North Carolina, Charlotte, N. C., Dec. 6th., 1910.

week, and at the end of the sixth week could take solid food without discomfort. Medicinally, morphine and atropine were discontiuued after first few days and ten grains sub-nitrate-bismuth every four hours with half teaspoonful milk of magnesia given. Peptonate of iron was given t. i. d. after the fifth week. Some twelve months later parents reported patient in good health.

Case two: R. H., boy, aged eight years; parents healthy; had none of the eruptive diseases of childhood; no history of perpura, scurvey, malaria or gastro-enteritis. Had during the proceeding eighteen months four attacks of pain, epigastric tenderness, nausea in vomiting. There was the usual history of improvement after attack, later return of digestive discomfort and pain after food which finally culminated in acute attack. When first seen, patient appeared to be rather poorly nourished, anæmic and at the time was in the midst of an attack. There existed tenderness over the pylorus; heart, lungs and kidneys normal; blood count showed hemoglobin sixty-five; reds, 4,500,000, whites 8,000. Spleen and liver normal. Temperature 99 F. Bowels constipated. Following day during an attack of vomiting patient raised a tablespoonful of dark blood. Treatment consisted of ice-bag to epigastrum, rectal nourishment, rest in bed and at the end of twenty days was given milk and limewater by mouth, and bismuth and milk of magnesia three times daily. This treatment was continued until the end of the fifth week, when semi-solid food was allowed. Three years later patient was reported by parents in good health.

Case three: R. J., boy, aged nine years, parents healthy, had the usual diseases of children and was in good health until two years ago when he would complain one or two hours after taking food, of pain in the epigastrium, acid eruction and this would be followed by vomiting and relief. Solids and acids were more likely to distress. Later there began to occur every two or three months attacks of epigastric pains, tenderness and and nausea, which were relieved only by rest in bed and starvation. During the interval there was some distsess and tenderness which woulh ffnally culminate in one of the acute attacks. This patient was seen only once and in consuliation, and at that time was anæmic, had enlarged tonsils and adenoids and later examination of stools, at the suggestion of family physician, showed the presence of hook-worm ovae. Several months later, during the recurrence of the pain, nausea and vomiting, his family family physician tells me there was present in the vomit a considerable amount of blood. This patient owing to the irritable condition of the stomach has been unable to retain thymol and consequently remains infected with uncinaria and there are still recurrences of attacks of nausea and pain. There is evidently gastric ulcer existing in this case and it is probable that the hook-worm infection and tonsilar disease lowered patients vitality and favored development of ulcer.

Case four: M. S. girl aged seven years, parents in good health. Heart and lungs in normal condition. Child was in good health until three months before, when there appeared pain after taking solid food, and acid eructions; these symptoms persisted for one month, when there came an attack of nausea, vomiting and epigastric tenderness. This was followed by the usual interval of improvement. Case was first seen in consultation and gave history of the developement four or five days before, of epigastric pain, nausea and vomiting, the pain and nausea were persistent and there was obstinate constipation. During examination in an attack of vomiting there came up a considerable quautity of blood.

The rectal feeding, which had already been instituted by the attending physician, was continued along with ice-bags, to abdomen. The patient progressed fairly well for thirty-six hours, when contrary to orders, an attendant administered a half ounce of epsom salts, and in about six hours there came on sudden severe epigastric pain, tympany, collapse and death in twelve hours. There evidently had occurred a perforation from the unnecessary administration of the purgative.

Symptoms: It would appear from the fact that one of these cases was of three months duration and three of eighteen, twenty-four and thirty-six respectively, that there is a chronic and acute type of gastric ulcer in children. That in the acute form there is a history of pain after food, and especially after solid food and that this pain comes on rather promptly after taking food and is partially or completely relieved by vomiting. In both the acute and chronic cases there were present the anterior and posterior tender-points. Gastric hemorrhage was present in all the cases and there was no other associated conditiou which would give hematemesis. In the acute case the stomach contents were tested and showed hyperacidity.

In the chronic type there was a history of pain immediately after the ingestion of food, but more frequently the pain came two or three hours after. They all gave the history of recurrent attacks of severe pain in the epigastrium, with marked nau-

sea and vomiting, lasting for several days and relieved by abstinence from food, rest in bed and ingestion of alkalies. These attacks would be followed by an interval of comfort of variable duration but sooner or later the digestive discomfort would recur. There were present acid eructions in both acute and chronic cases,

The blood count was made on one case and showed a hemoglobin percentage of sixty-five, with white and red cells normal.

The number of cases here reported is too small to draw any definite conclusions. It is possible, however, that gastric ulcer in children of five to ten years of age, is more frequent than medical literature to the present day would lead us to believe and it is further probable that some of the cases in children showing the foregoing symptoms and which are called chronic gastritis or acute indigestion are really cases of gastric ulcer.

Clinical Phenomenon of Pellagra.*

By J. W Wallace, M. D., Concord, N. C.,

I must confess in the beginning of my paper that it is not only embarrassing to to the writer alone, but to some extent to the Medical profession as a whole, to endeavor to dwell on any facts whatever, regarding this loathsome disease known as pellagra.

After having five cases right recently in charge, and noticing different symptoms, I decided when I was asked to prepare a paper for this occasion to take the responsibility upon myself to write something concerning the Clinical phenomenon of Pellegra.

I do not come before you claiming that I have anything new, nor do I claim that I have discovered anything more than what has been before the Medical profession in the past, but I do want to say here that I have noticed the different symptoms in different patients to be so consistent, till, I thought it would be worth while mentioning the important ones briefly.

Now if you will pardon me here for just a little while, I would like for us first to take into consideration a word or two in regard to its prevalence in the United States

Forty-six years ago, according to the statistics, there were two cases of probable pellagra, with mental symptoms reported by Dr. Gray of Utica, N. Y., and Dr. Tyler of Somerville, Mass., at the annual meeting of American Asylum Physicians, held in Washington, D. C.

*Read before the Seventh District Medical Society of North Carolina, Charlotte, N. C., December 6, 1910.

Exclusive of one case reported by Dr. H. F. Harris, of Georgia, and one by Dr. S. Sherwell, of Chicago, in 1902. The disease has since 1864 till recently, either disappeared or has been overlooked or, which is more likely, the physicians when first studying one of these puzzling casses, and inclining to the diagnosis of pellagra has accepted too readily the assertion of all authorities that pellagra does not exist in the United States, although his professional conscience may never have been satisfied.

The statistice show, that in spite of authoritive denial of the existence of pellagra in this country, a number of cases of the disease were recognized and reported in 1907, independently by medical officers of Alabama and South Carolina Asylums.

In the summer of 1908, the disease was identified with Italian pellagra by two Southern physicians who visited Italy for the purpose of studying the disease.

Following these observations, pellagra has been observed in nearly every State in the Union, and shows an insrease in number of cases every year.

Now let us take up in a few more words, some of the more consistant symptoms.

There seems little doubt that the condition recognized now as pellagra has existed in the Southern States for many years—25 or 30 at least—and has been regarded as an unusual manifestation of Tuberculosis, Syphilis, Malaria, Acute delirium, Hook-worm, Dermatitis Exfoliativa, Dcyema, etc.

Careful search through Medical literature may disclose the fact that cases of pellagra have been reported under these or other diagnosis as well.

So taking all this in consideration we may live to see that the probabilities are that we have had more pellagra in this country than once thought for.

Briefly, stating the more consistent symptoms which made themselves more noticeable to me, first, the peculiar salivation, the patient would want you to give them something to stop them from the excessive spitting; secondly, the majority would complain of a choking sensation, some would complain of their bones aching and of Supra-Orbital Neuralgia, burning pains in the throat and stomach. Then later in the Erythematous stage, which generally shows up on the dossal surfaces of the hands first. I noticed this condition to occur on the right hand, alone, once for three weeks before any sign of it appeared on the left, and they complain of this condition burning them and would complain of it burning them more late in the afternoons. I have noticed this Erythematous condition to extend over the entire body in two cases.

The severe vomiting seems to be general in this disease, lasting weeks at the time, in some cases. Severe diarrhae with passage of blood and mucous in some cases, and differ as to the severity in different cases.

At this stage the patient will complain generally, of piles, which is an erythematous condition in and around the annus which seems to be very common in this disease.

I also noticed two of my patients complaining of their eye sight looking cloudy, which seemed to be an effection of the optic nerve.

The liver seemed to be involved in all my cases, somewhat enlarged and very tender on palpitating and percussion.

The ratio in regard to sex, four cases female and one male.

The mental symptoms are very peculiar in some cases. I recall one of another doctor's, where the patient of a very wealthy family though they had become poverty stricken and advertised in the evening paper for sewing. Another one, a male patient who would not stay at home, would go off and hire to some one, said while he was at home some one of the family was continually talking about him, etc.

When the great mystery is solved, I think we will find pellagra, or some form of it at the foundation of some of our peculiar skin troubles which yield to nothing almost.

A few words in regard to my treatment and I'll close. I have put my patients on the most nutritious diets that could be thought of, and I have used Atoxyl and Soamin, hypodermically to their toxic effects almost and have used arcenic in the form of Fowler's solution in dosage of 5, 10, 15, 20, and 30 drops, and pushed it to its toxic effect. The Serum, and Hydro-Therapy treatment I did not try, but after trying all these others, I found no results toward cure, and found myself agreeing with Sir Henry Holland when he once wrote a short note in Medical Literature, saying it appeared certain that mere medicine has done very little for the relief of pellagra.

No matter when it is, but when this great question is solved as to what causes pellagra and a cure for it, it will be one of the greatest acts that has ever, or that ever will be solved in this advanced profession of ours.

PELLAGRA AN IMPORTANT PUBLIC HEALTH PROBLEM.

Morbidity returns at hand show a death rate from this disease of 27.6 per 1,000,000 or 552 deaths a year in the State. When we recall that this disease has been recognized only three years in North Carolina, and that many physicians are as yet unfamiliar with its symptoms, we are forced to the conclusion that many deaths due to pellagra are unrecognized and not returned, so that the death rate, based on the actual death certificates, the recognized cases, probably is but little more than half the actual death rate. When we think of this new foe taking about as many lives as typhoid fever, we can no longer regard it as an interesting curiosity or as merely a cornmeal fad.

Grave as the situation is at present, the real need for thoughtful consideration of the disease, as a menace to public health, is the possibility of its increasing. That this may happen is shown by carefully collected statistics on the disease in those European countries where it has long been recognized.

For example, Diedmont, Umbria, and Tuscany attribute over 5 per cent of all deaths to Pellagra. Neusser asserted that in 1886 in Venice, with a population of 36,588 natives, there were 1,086 cases of Pellagra.

In Roumania in 1885 there were 10,626 cases; in 1886, 19,797 cases out of a population of 5,300,000.) In 1892 there were 4,500 cases in 1898, 21,272 cases. Triller says that in 1006 in Roumania there were 30,000 pellagrans.

Tubal Dysmenorrhea.

By C. M. Strong, M. D., Charlotte, N. C,

Dysmenorrhea is one of the most common of female diseases as well as one of the most unsatisfactory in yielding to treatment, that the physician meets with. The reason for this is its causes are numerous and complicated.

Most of the cases are classed and treated as uterine, or obstructive in nature, while the facts are, this class constitutes only a small percent of the cases.

Having been accused of specializing on diseases of women, I have of necessity met with a great many cases of dysmenorrhea. and reasoned that my experience and deductions might prove of interest to my fellow practitioners of this society.

Owing to the brevity of this paper my conclusions may appear immature and arbitrary. but I assure you I make them thus, only with a feeling of my limitations.

The causes of dysmenorrhea are, 1st. Generally the most prominent condition under this class, being neuresthenia, I cannot understand how other constitutionaldiseases would cause dysmenorrhea except by contributing to this neuresthenic condition. And on the other hand we must not forget

*Read Before the 7th District Medical Society of North Carolina, Charlotte, N. C,, Dec, 6, 1910.

that dysmenorrhea will in time cause neurosthenia. I have seen some very pronounced cases of neuresthenia completely cured by the relief of the dysmonorrhea. It is therefore of importance to know which condition antedutes the other.

The 2nd class of causes may be called uterine. These can be but few in number and should be easily diagnosed and treated. Misplacements are common and easily found but in my experience they do not occupy the prominent etiological position which most texts have given them. We often see pronounced deflections with little or no menstrual symptoms, which fact has lead me to investigate more thoroughly, these cases.

Obstruction in the uterine canal is undoubtedly a cause, but I find it comparatively infrequent, for we find oftimes our worst cases have patulous canals. It is an easy matter to determine if this condition is the cause, by simply dilating the cervix a day or so before the expected flow, which will of course insure an open canal.

If the above conditions do not explain more than a small percent of the cases we must, of necessity look deeper for the reason. There is a condition of the uterus known as fibrosis uteri caused by an atheromatous condition of the blood vessels, by senile changes, and often by toxemia, corresponding to like changes in other organics of the body, i. e. kidneys, heart, prostate, etc., which has for its basic etiological factor, disturbed metabolism.

The treatment is preventive, once having taken place, nothing short of hysterectomy has any lasting effect.

There remains now only the periuterine causes, concerning which I desire to speak more fully.

Physiologist tell us that at the menstrual epoch the mucosae of the uterus and tubes becomes congested, swollen and succulent, and that the bloody flow comes principally from these structures, therefore we see that any interference with this congestion and flow will cause painful and difficult menstruation, and so we see that we must give peri tubal and uterine pressure from any cause whatever, a place as causative factors in dysmenorrhea. And in my own experience I find cases which have resisted the old formulated treatment to yield immediately to treatment directed at these conditions. The tubes, because they have a vernacular movement similar to that of the intestines, are subject to the same sort of pain, i. e., spasmodic griping in nature, similar to that of tubal pregnancy, and intestinal colic.

Tubal dysmenorrhea also has a distinct cycle of pain, that is pre- and post-menstrual, being relieved by the flow, only to return again, while that of uterine is relieved by the flow, and does not return until the next period.

Again the peri-uterine and peri-tubal type is followed by pelvic tenderness more pronounced on both sides and often radiating down the thighs. Nausea and vomiting are present in a few cases, this being due probably, to ovarian irritation.

We often find a very sensitive appendix due to sympathetic continuity which sometimes leads to an operation for appendicitis without any effect being produced on the dysmenorrhea. The moral of this being clearly. be very guarded in making a diagnosis of appendicitis during the menstrual moliumen.

I am, of course, aware that there is a distinct appendicular form of dysmenorrhea, and that the removal of a diseased appendix will, in these cases, effectually cure the dysmenorrhea, but the diagnosis must be made by exclusion and in the interim.

We see then how complex a condition is dysmenorrhea, and how important it is to make a diagnosis, and that time and study are required to differentiate these types; which must be done, for each calls for its specific treatment. I can perhaps better prove my points by citing a few cases:

Case No. 1. Miss K. Negafive history, except dysmenorrhea of the anti and post type, was always confined to bed from 3 to 5 days at menstruation. Intermenstrual examination revealed normal position of uterus, patulous canal, broad ligaments seemed thickened and were painful, finding no uterine cause and no neuresthenia, advised a laparotomy which was accepted. Operation showed complete occlusion of each ostium tubae at the uterine cornua, with some little pus in each tube.

There was no history of an acute infection in the past. and the microscope revealed nothing, evidently the organism had become attenuated.

Operated on three years ago, saw her two weeks ago and found her entirely relieved. This was a case in which uterine treatment was positively contraindicated as can readily be seen,

Case No. 2. Miss O., aet 22, suffered all menstrual life, pain especially marked over the appendix, though somewhat indefinite, tenderness more marked over the appendix. Examination between flows, showed not a marked antiflection, and we were convinced this was a straight appeudix case. Operated, and on removal of appendix found no gross lesion of that organ. There was no let up in the pain, and six months later she unlike Feffries, came back (unfortunately, too many of our cases do came back).

We then dilated and put in an aluminum tube, since which time she reports a complete relief. This case was one of the obtructive uterine cases, strongly simulating the appendicular type.

Case No. 3, Mrs. R., age 23, large and healthy in appearance, has been a severe sufferer for years, especially with the antimenstrual delayed type of pain. Is the mother of two children (here I might remark that multiparae seldom suffer from the obstructive form) because they nearly always have a patulous canal, though of course extreme flexions, clots, or intrauterine neoplasms, could cause this condition even in a multipara. These were absent in the case in question, but thinking that it might possibly be of uterine origin, especially as menstruation was 7 or 8 days delayed, we waited for the appearance of the moliumen and then dilated the canal, with no appreciable effect on the symptoms. We then did a laparotomy and found both tubes kinked up and occluded, not having any data as to the straightning and dilating of tubes we took them out, the effect was very gratifying, the extreme nervousness disappeared together with the dysmenorrhea, which had caused the nervousness.

Case No. 4, Mrs. A., age 38, mother of 6 chilPren, had had no symptoms referable to menstruation until 3 years ago, when pain began to appear at her periods and continued until her cessation, the flow was always free and regular, which fact alone ruled out the obstructive type. She had suffered several curettement which seemed only to aggrivate her trouble. When I first saw her she was almost a nervous wreck.

A bi-manual examination revealed a large hard uterus normally placed; the tubes were free from disease and moveable. Her arterial tension was high, 180, Due to arteriae sclerosis. Diagnoiis: uterine fibrosis with general atheroma. Operation was removal of uterus and tubes, together with general treatment on her diathesis, which was done 18 months ago, and complete restoration of health resulted.

Many other cases could be cited, but time forbids and these suffice to bear out my contention, that dysmenorrhea is a complex condition, that its study will carry one over many moons, and that its treatment may at times. require radical measures.

And here I would like to mention another cause which has only recently been recognized, i. e., venous stasis, or haemorrhoidal conditions of the pam penniform plexus. This condition should always be looked for in obscure cases, as I have no doubt that it is sometimes a prominent cause, but as its etiological entity has not been fully proven. and having no practical experience in such cases I am unable to say anything more than to draw attention to its probable existence.

Now as dysmenorrhea is so very common, and as it is growing more so as civilization advances, as it seems to advance para passu with civilization, if this paper-rambling as it is, will cause us to look more fully into its causes, thereby enabling us to relieve a larger percent of those so necessary adjuncts to happiness and well being, it will more than have fulfilled its mission.

703 S. Tryon St., Charlotte, N. C.

One Complication of the Puerpera.

By Baxter Haynes, M. D., Cliffside, N. C.

The key to the successful management of a woman after labor is a thorough understanding of the many important diseases which may exist previous to the confinement—though lying dorment for a long period they may insiduously and abruptly make their appearance during the incipient stage of the puerpura.

There is no doubt that a normal labor is a physiological function, and during recovery from its effects, disease should not occur. But we should always bear in mind, that very few of our women throughout pregnancy, labor, and the puerperal state, are in a perfectly healthful condition.

The surroundings of the pregnant and lying—in women are very important factors to be considered. The lack of cleanliness; the exposure to contagious and the media of infectious diseases; and trying to satisfy an abnormal appetite have a very important influence upon child-birth and the peurperal state, and make a trio of puerplral troubles, which, if we could entirely eliminate, we would have nothing but uneventful recoveries. But as it is, every case of làbor under most favorable cicumstances is attended with much risk to woman, child and doctor. The doctor's success and reputation as a general practitioner is principally made or lost by the record he makes in his obstetrical work.

For a woman to go through pregnancy, and give birth to a normal healthy babe, is in a common sense a trivial performance, but when we give the subject a second and more serious thought, it is the greatest, most marvelous and the most sublime stage through which any living being has even passed, and during this great and eventful period these great beings whom we call women, should have every attention possible to lighten every burden, to make them more cheerful, and as painless as possible

*Read before the Seventh District Medical Society of North Carolina, Charlotte, N. C. Dec. 6th, 1910.

in order that we may secure for them as far as possible an uneventful recovery.

Briefly I wish to note a few of the circumstances with which I met in one case,—espescially one rare complication which prompted me to write this paper.

A member of the Divine profession recently moved into my field from another country. He soon afterward informed me that his wife was pregnant, and engaged me to attend her during her confinement, which he expected to be about two months later. I learned from him that she was a multipara, and he stated that she was appearantly in better condition than in previous pregnancies.

I called several times unsolicited to see the patient during these two months, and found her apparently in a good condition. I made several ordinary analysis, and found her urine normal save for a slight increase in phosphates. She had no headache, no roaring in her ears, and no specks before her eyes: and in fact no symptoms which might lead one to suspect any further trouble.

On April 23rd about 11.30 P. M., at the expected time, I was called to see the patient and found her in her first stage of labor. The first stage lasted about six hours and the second stage about one hour. I had to deal with an adherent placenta and used Crede's method.

During this stage the patient complained of a smothering sensation, and began to turn blind. The placenta was soon delivered and as there were no signs of hemorrhage, I gave my attention to her unfavorable symptoms.

Her respiration became difficult and laborious, her skin cold and clamy, she became very pale, and lay with her eyes closed most of the time. Her pulse became very rapid and weak, the second cardiac sound was very much accentuated, but I could discover no distinct lesion. Her heart beat as if it were coming through the chest wall. There was pain in the gastric region and she was very much nauseated. She became very thirsty. She experienced distinct chilly sensations, but no chill. Her temperature was not taken at this period.

She complained of severe cramps in her legs, arms, and neck. Her limbs seemed to be in a state of toxic spasm.

After the administration of certain remedies and the patient resting well I went to my home only a short distance away. Eight hours later I was summoned and found the patient suffering considerably from after pains. I relieved her of a number of large blood clots which gave her considerable relief. During that visit the patient informed me that her mother died from an attack similar to the one she had passed through during that day.

I returned the next day and found my patient nauseated, expelling large quantities of gas from her stomach, abdomen very much disturbed and very tender over stomach, no appetite, complaining of not having slept any during the night. Her temperature was 99 2-5, pulse 110 and not very strong. Breathing a little shallow with 22 per minu. She had had no discharge from the uterus in 24 hours save the clots I removed myself. All the above symptoms continued for four days.

On the fourth day the patient had a chill, with the cramp-like conditions of the limbs very marked. Respiration, shallow and frequent, heart rapid and weak, second heart sound much more accentuated than in the beginning, no appetite, nausea and pain in stomach, abdomen very much distended with gas, the locia very scant, slightly offensive. I gave the patient a hot saline douche, and while doing so, her cramps were much more severe than they had been before. She became blind and her breathing more rapid and pulse ran up to 150 and skin became very cold and clamy.

After some medication my patient was much relieved and I returned to my home.

There was a recurrence once or twice daily for about 28 days of the following symptoms; the cramps, blind spells, rapid weak heart, shallow and difficult breathing, all of the gastric symptoms, the chill and fluctuating temperature and scanty locia.

On the eight day of the puerperal state, a consultation was held but no positive diagnosis was made, though we agreed that an infected uterus was the most probable etiological factor. An intra uterine douche was agreed upon as the most important treatment and kept up twice daily for 8 days. Up to this period, there seemed to be no radical change in the condition of the patient; and as a forlorn hope I decided to make a microscopical examination of the blood, which revealed the fact that my patient had the algid form of Malignant Malaria.

Scarlet Fever.

By W. C. Bostic, M. D., Forest City, N. C.

Mr. President:—Gentlemen of the District Medical Society:

I should not ask your attention on this subject, but for the reason I have seen some very ugly conditions arise in the course of some very mild cases of scarlet

*Read before the Seventh District Medical Society of North Carolina, Charlotte, N, C. Dec. 6th, 1910.

fever, and these complications arising in cases with scarcely a history of any illness previous to the appearance of complications.

These cases have prompted me to observe the disease in all of its clinical types and hence I wish to offer a very brief description of this disease.

Kerley states scarlet fever is one of the most dangerous diseases to which children are subject, because of its marked tendency to complications. We never know in a given case whether mild or severe, what the morrow may bring forth.

Scarlet fever, an acute contagious disease characterized by high fever with a scarlet eruption or rash, with the Strawberry Tongue.

It is probably caused by some form of Micro-organism (probably Class's Bacillus Diplococus Scarlatinæ.) Its onset is sudden with chills vomiting, and sore throat, followed by fever and rapid pulse. After about 24 hours the eruption appears as a rash of thickly set red spots, which begin to fade in two or three days and is often gone by the end of the first week.

The fever departs in favorable cases with the disappearance of the eruption which is attended by desquamation of the skin in fine branny scales and in large flakes. Recovery may often be looked for in 2 or 3 weeks, but is seldom complete in less than 6 weeks, and it is during this stage that complications are liable to occur, chiefly as a result of exposure to cold and errors in diet. The nephritis is liable to lead to dropsy and uremia. Other complications of throat, ear and eye are not infrequent, and often prove chronic.

Scarlatina attacks principally children and youths. I have however noted one case where the mother contracted the disease from her nursing babe. Second attacks are extremely rare. For ease of description we note four types:

1. Scarlatina Anginosa—A dangerous form with marked throat symptoms.

2. Scarlatina Simplex—A mild form attended with but little soreness of the throat.

3. Scarlatina Maligna—A variety of severe symptoms and great prostration often fatal. This form of the rash often disappears suddenly and prematurely.

4. Scarlatina Latens— A form in which no rash or fever is observed, but which is manifested in kidney disease or some other severe complication.

It is this variety which has given me the most trouble. It is the wolf in sheepsclothing. It is an easy matter to watch and guard a typical case against threatened complications, but in this type we may not be able to get a history of any illness until an awful picture is before us in the form of general edema, marked dysnea, pallor and threatened uremia convultions &c.

In the treatment of this disease our best efforts should be put forth in prevention of the malady. And the cases should be strictly isolated and the public thoroughly warned of its real nature and of the great danger of even the mildest cases.

As to medication I have nothing new to offer. I always try to meet the Symptoms and complications as they arise.

The patients urine should be frequently analyzed for several weeks.

And exposures to cold and errors in diet to be avoided.

Congenital Hematocolpos, Hematometra and Hematosalpinx.—Lewers in (The London Practitioner,) says that in most cases of retained menses the fluid is contained in the distended vagina alone, and the uterus is not dilated. The condition is one which may be conveniently termed simple hematocolpos. In such a case it is merely necessary to divide the obstructing septum and allow the retained fluid to escape. There is in such cases no risk in hastening the escape of the fluid by pressure on the abdomen, or by using a vaginal douche. There is no special liability to sepsis in cases of retained menses more than in any other operation case. The supposed inherent liability to sepsis in certain cases of retained menses is to be explained by the presence of hematosalpinx in addition to hematometra and hematocolpos. The dilated tubes become infected once the vaginal septum has been divided. If hematometra exist as well as hematocolpos, a condition which is easily recognisable after opening the vaginal septum by finding that the finger passes the internal os into the uterine cavity, the probability that the Fallopian tubes are dilated is so great that the safest course is to perform an exploratory laparotomy. The tubes, if found dilated, can then be removed. If it is likely to be impossible to keep the vagina patent, the uterus should be removed also.

The Fellows Company, of New York have recently issued a booklet entitled, Some Pasological Hints and other Useful Information, which they will be glad to send to any physician, desiring a copy. The booklet is neatly gotten up, and will be found useful to those who study it.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

UPON THE PRESENT DAY KNOWLEDGE OF MENINGITIS.

The mechanstherapy ot meningitis is based upon the principle of physical changes in the hydrostatic intracranial tension. Decompression in some form or other, by some means or other should be the guide in our treatment. All our endeavors should proceed from the one motif, that of reestablishing the normal circulatory conditions within the cranial serious cavities. The rationale of this therapeutic attitude may be briefly summarized as follows: The study of the distory of meningitis demonstrates clearly that the records of progress in the knowledge of meningeal affections coincide and are identical with the prevalence of the mechanical conception of this disease, gaining and receding according to various currents in medical thought. Thus we can easily understand why Robert Whytt's influence, bgun in 1768, is still noticeable in our present day conception and classification of meningitis. Though leading to temporary confusion between tubercular meningitis and "acute hydrops of the chambers of the brain" it corresponded much more to actual clinical and post-mortem findings than the humoral theories of the medical vitalistic era prevailing during the first half of the last century. It is to be regretted that the mechanical genesis of meningitic symptoms was again lost sight of when in the last half century the attention of physicians was centered successively upon the role of phlegmosias, inflamation, intoxication and infection, or any combination of them, then thought to be the deciding factor. Pathologists and bacteriologists applied their interpretations to this problem in their own special way, and added to the literature amongst other things such terms as meningitis without inflamation, etc. A histological classification was urged by the one, and bacteriological varieties enounced by the other. The clinical side of the question was slighted until H. Quinke ressescitated the mechanical explanation of meningitis by discovering and vulgarizing lumbar puncture in 1892. But this view did not gain ground until Schulten, Kocher, Cushing, Horsley, and others realized by experimental pathology what Whytt, Morgagin, Senn, and Quinke had demonstrated upon the human subject. The thoughtful clinician of today who has watched carefully the filtering of this problem through the sands of time acknowledges that meningitis can be diagnosed only by means of its associated physical changes of the hydrostatic intracranical tension, in other words by means of the commitant hydrocephalus. It is very fortunate that the cerebral centers manifest a natural and elective sensitiveness towards mechanical irritation such as pressure, commenscrate with their degree of functional differentiation. But it is also true that death in meningitis is due to pressure effects rather than to mere infections or histopathological factors. Since the pathogenesis and diagnosis of meningitis pivot upon the physcal factor or factors, and since death therefrom is mainly the consequence of pressure effects its therapy should, logically, be based upon this principle. Let us then first establish the presence of miningitis by clinical means, then ascertain its nature bacteriological and other laboratory tests, and thirdly its complication by past or present morbid processes. With these perequisites on hand the therapy is consequently mechanical, whether this is to be achieved by temporary or permanent subdural, spinal, basal, or ventricular drainage by puncture, craniotomy, or other pdysical, or by medical or serological treatment depends upon the individual indications in each case.

HENDERSONVILLE IS ASKING FOR THE NEXT MEETING OF THE STATE MEDICAL SOCIETY.

We are informed that Hendersonville, N. C., is asking that the meeting of the Medical Society of the State of North Carolina, to be held in June, 1912, be held there. They seem to recognize that, up to a few years ago, it would have been mere bragadocia to even suggest that they were able to accommodate the meeting in that little city; but they now claim that "the little city in the mountains" has grown to such proportions, that their hotel accommodations have grown so large and made of such a quality, that they can handle the meeting with the greatest easy, and in a manner that will do credit to any city in North Carolina.

While Hendersonville does not boast of a long roll of medical men, yet it is known throughout the state that there is a quality that makes up for what is lacking in quantity. They have made but few requests of the society, and it may not be unbecoming that this one receive favorable consideration at the hands of the nominating committee at the coming meeting in Charlotte. Last year the meeting was held in the east, this year it will be held in the middle section of

the state, and it might be only fair that it be held next year in the west.

Asheville is the only city in the west that has ever been given the meeting so far. We should congratulate ourselves that we now have another western city where we can go, and one which is now certainly deserving recognition at our hands.

Hendereonville is no longer the little flag station it used to be. It is made up of about forty-five hundred souls, the very best people that can be found in our mountain section. It is a progressive little city, adorned by nature in a way as to make it the envy of the entire state. Its sceinic environments are beyond ordinary discription, and it will not be attempted here. Its climatic conditions are second to none from a health-giving and pleasure creating standpoint. Its railroad facilities are now excellent, having five fast passenger trains daily in each direction. Every convenience of the modern city is to be found there. There are two spacious halls that would accommodate a meeting of twice the size of the state society, either one of which can be had.

We are assured that the hotels will gladly give a reduced rate to the members of the society, and that every accommodation that may be demanded will be gladly afforded. Let us go there. We will have a good time, a profitable meeting, and be further permitted to come into closer contact with our mountain friends. It is a certainty that no mistake can be made in meeting there, and thore will never be any cause for regret. It is therefore suggested that we, in one voice, shout "on to Hendersonville", and the echo from those beautiful mountain sides will answer "welcome."

PREVALENCE OF GASTRIC ULCER.

The is a growing tendency to ascribe many cases with dyspeptic symptoms to disease of other organs than the stomach. It is a fact that chronic appendicitis, gallstones and other conditions often produce symptoms so markedly referrable to the digestive tract as to mislead the diagnostician. On the other hand, in addition to the affections of the stomach which produce evident symptoms this organ is often the seat of the disease when the symptoms are atypical or almost absent. Particularly is this the case with gastric ulcer and achylia gastrica. If the latter is present and does not give the patient trouble, treatment is not needed, but in the case of ulcer the failure to recognize and cure may be followed by disastrous results.

We are becoming more and more aware of the great prevalence of ulcer of the stomach and duodenum. Many are recognized, many are not. The typical text book case with symptoms of pain, vomiting and hemetemesis may be diagnosed by anyone but we know that these cases form a very small percentage of the number of ulcers and we have reason to believe that not only may one of these so called cardinal symptoms be frequently absent but that there is a considerable number of cases in which none of them are complained of.

In at least 25 per cent. of the reported caaes of perforated gastric and duodenal ulcer the presence of the lesion had not been suspected before the accident occurcured. A small percent of ulcers perforate and as it would be absurb to think that the cases which perforate give less distinct symptoms than the others, the conclusions follows that there are numbers of people going about with ulcers which are never recognized,

So much for the theoretical side of the question. A test which has been of great value in aiding diagnosis in doubtful cases and which is a means of proving that ulcers are more frequent than had been supposed, is the benzidine test for occult blood in the stool.

A positive test occurs intermittenly as a rule, and the repeated examination of the patients stool for the presence of the occult blood will frequently give an inkling of a previously unsuspected ulcer.

A practical means for recognizing and localizing septic ulcer was described by Dr. Einhorn in April 1910. Its's reliability has not as yet been proven, as many observers have not reported their experiences with the test, but it has been used extensively in Washinton, D. C., by Morgan, Clark and Verbrycke. They have been able by this means to diagnose many latent or atypical cases (some of which were proven at operation, others by reaction to medical treatment for ulcer,) which they would certainly otherwise have missed. The apparatus consists of a small metal "duodenal bucket" to which is attached a braided silk thread. At 70 cm., from the bucket a knot is made. The patient swallows the bucket and thread, with the aid of a little water, at bedtime, until the knot arrives at the teeth, when the end of the thread is made into a loop and fastened to the nightdress with a pin. It is feft in situ all night during which time the bucket passes the pylorus, and thread remains in proximity to the ulcer and by irritating it causes it to ooze blood. In the morning the thread is pulled up and examined for the presence of a blood stain.

Another fact indicating that ulcers which give few or no symptoms and some of which recover by themselves, is the discovery in

the autopsy room of scars of healed ulcers in many patients dying from other causes.

Because of the frequency then of unrecognized ulcers of the stomach and duodenum it behooves us to constantly be on the lookout for them and to make use of the latest tests and methods for their diagnosis in all csses presenting the slightest suspicion of their presence.

RELATIONSHIP BETWEEN ULCER AND CANCER OF THE STOMACH.

Until comparatively recently we knew only that cancer occasionally developed on the base of an ulcer of the stomach. It has remaind for the Mayos, Moynihan, Rodman and other surgeons of large experience to show that between 40 per cent. and 70 per cent. of their gastric carcinomata operated upon showed signs of having developed upon the base of a previous existing ulcer. Again it is claimed that a considerable number of resected ulcers show indications of beginning malignancy.

Wilson and Willis from Mayo's clinic have presented their theory of epitelial segregation in these cases. In other words they claim that whatever may be the essential irritant there is microscopial evidence backing up clinical evidence that a high percentage of cases of carcinoma have developed on epithelial cells which have previously been isolated from normal surroundings, either by the formation of diverticula or by scar tissue in ulcer bases.

They have supported this view with considerable evidence gained from microscopic investigations utilizing the very large amount of material from the Rochester clinic.

While the surgeon feels that the occurrence of cancer following ulcer is a common happening and therefore advocates operative treatment more frequently than the medical man and stomach specialist do not as a rule share his views. Dr. Einhorn, from his large experience states that quite contrary to being of the above opinion he believes that the presence of an ulcer is in a way opposed to the development of cancer. He considers that probably less than 1 per cent. of ulcers of the stomach are followed by death from malignancy.

Stockton remarks that we sometimes find cancer growing on the seat of a chronic ulcer of the stomach, but not as frequently as is supposed by some. He has observed many recurrent ulcers for years which did not develope into cancer. He is opposed to the intervention of surgery in gastric ulcer, unless there is a definite indication then present.

Neither is the microscopic evidence of epithelial segregation accepted by many as a proof of a tendency to malignancy. Well with a considerable show of reason, contends that the presence of the granulation tissue in healing, carries with it a tendency to atypical epitelial proliferation and certainly it is not surprising that some of the collections of cells should be cut off by the scar tissue with probably no malignant change following. Dr. Jacob takes a most sane view of the question, standing midway between the others and explaining some of the discrepancies. He says that the surgeon and medical man take their statistics from different sources. The surgeons statistics are correct from his standpoint, but are only collected from a certain class of perhaps the worst cases. Dr. Jacob states that perhaps 3 per cent. of cases of cancer of the pylorus are on the scar resulting from an old ulcer and again that ulcers recover in large numbers with no tendency to malignancy.

It would seem that the question is still far from settled and that statistics should be collected from a large number of cases from different sources and combined. The surgeon, the specialist and the general practitioner treating upper classes, and physician treating the poorer element should all be represented. The probable duration of the ulcer should be given; and the longer the cases have been followed the more valuable would be the results of the investigation. The matter is of considerble import as the method of treatment of ulcer, with a view to the prevention of cancer is to be settled largely by the answer to the question, "How often does cancer develope as the result of of a previous ulcer?" and the allied "How many ulcers of the stomach later undergo malignant change?"

CREOSOTE IN THE TREATMENT OF PULMONARY DISEASES.

One of the most valuable therapeutic agents, in the treatment of Tuberculosis of the lungs, Bronchial Catarrh and Pneumonia, is Creosote, the well known product of the distillation of wood tar. This substance is composed of several of the phenols —the most important of which are guiacol and crosal.

A preparation known as Creosotal is obtained by the action of carbon-oxy. chloride on Phenal Sodium Compounds of Creosote.

Creosote is not in any way a cure for tubercular consumption, but if used early in the disease and in sufficient doses it arrests or modifies the catarrhal inflammation of the mucous coating of the respiratory tract, and in this way exhibits in a marked degree the work of the tubercular bacilli. It is possible also that when the system is sat-

urated with the drug that the lung tissue perineated, presents an unfavorable or uninviting field for the action of the bacillus, the micro-organisms prefering to starve rather than to feed on it.

Creosote is one of our best remedies in pneumonia. The attention of the profession was especially called to its use in this disease by Dr. Van Zandt, of Dallas, Texas, in 1894. From his observation and that of many others, among whom is Dr. Tyson, of Union, Penn. There is no question of the ability of the drug especial in broncho or catarrhal pneumonia.

It is altogether probable that its good results here and from similiar reasons referred to in the treatment of tuberculosis.

ADMINISTRATION:

Its pungent nauseos taste and penetrating odor, makes it somewhat difficult drug to administer in sufficient quantities, hence the profession has been induced to use t he carbonate or creosotal as it is called, patented by Hayden, of Germany, and which sells for $1.00 per ounce. A price at once prohibititory in the poorer classes, which, without dispute composes the larger part of the race.

To be effective this "Creosotal" must be given in doses of from one ½ to one teaspoon full every 4 to 6 hours, which would entail a cost of from 50 cts. to $1.00 per day and none but the rich could afford it. Besides all this the profession in prescribing the product of Mr. Hayden, and is endorsing an iron-clad patent and contributing to swell the coffers of a conscientious manufacturer.

One purpose of this article is to insist that Creosote can be safely and easily administered without the help of Mr. Hayden. The drug is perpectly soluble in glycerius to which add a sufficient amount of syrup simple or syrup of orange and you pour a mixture easily given to the most delicate subjects, even to children. Or a few drops on sugar followed by egg albumen, can be administered with ease. It can also be given in milk.

In catarrhal affections of the upper air passages—it should be given by inhalation. Simply pour a few drops in hot water and inhale the steam.

The dose is any where from two to fifteen or even twenty drops, every 4 to 6 hours until the system is well under the influence of the medicine. It can be given in chronic cases for a long period, with no bade ffects, by commencing with small doses and gradually increasing from day to day.

SYPHILITIC REINFECTION.

The old views as to the extreme rarity of two separate and distinct syphilitic infections have long been proved to be untenable, and many observers have reported cases, which will stand the most careful scrutiny, of undoubted reinfection after the cure of a previous attack. Such an event is really the best proof of the efficiency of the treatment adopted; for the protection afforded by syphilis against again contracting the disease is lost when a complete abolition of the infection has been brought about. In the Dublin Journal of the Medical Sciences, Dr. FitzGibbon records an interesting case in which it seems abundantly proved that such a reinfection took place three years and a quarter after the original lesion; this is the shortest period hitherto recorded between two successive infections of this kind. The patient was first seen eight weeks after an admitted exposure to infection; he had then typical chancre, rash, generalised adenitis, mucous patches on the tongue, and snail-track ulceration of the fauces. He was given intra-muscular injections of Lambkin's cream for two and a half months; then a three months course of potassium iodide; and then a further seven months of injections. Recovery was rapid and complete. Three years and three months later he returned with a fresh chancre and other symptoms of recently acquired generalised syphilis; exposure was admitted eight weeks previously. The same treatment was begun and proved equally satisfactory, though the patient did not persevere with it as long as he was advised to do.

VACCINE TREATMENTOF DIPTHERIA.

The persistence of the Bacillus diptheria in the nose or throat of a patient who is clinically quite recovered from diptheria is familiar to all; and the importance of such cases in leading to the dissemination of infection is also well recognised. Dr. P. E. W. Smith had such a patient under treatment, and adopted a hint thrown out in Sir A. Wright's "Studies on Immunisation." He publishes details of the case in the Australasian Medical Gazette. A girl of eighteen suffered from an uncomplicated attack of diptheria; the Klebs-Loeffler bacillus was found in practically pure culture, and the usual serum treatment carried out. The membrane speedily disappeared; but a week later a small patch of it recurred and the temperature again rose. A second dose of antitoxin was followed by satisfactory recovery. Swabs were examined every week, but in spite of energetic local treatment they always showed a good growth of the bacilli. At the end of four months the idea of an autogenous vaccine was entertained. and an injection of six million diptheria bacilli and ten million staphylococci.

prepared from the patient's own organisms, was given. This was followed by reaction at the site of injection and by some general disturbance, with a temperature of 100.2. At the end of a week (the throat still containing the specific organisms) another injection was given. the dose being increased to eight million bacilla. There was much less reaction, and a few days later a swab yielded negative results. According to Bosanquet and Eyre, this use of diphtheria vaccine is an established and useful one. But its adoption is as yet far from universal, and increased experience of its value is welcome.

ACUTE NEPHRITIS FOLLOWING FOLLICULAR TONSILITIS.

That the infectious condition of Acute Follicular Tonsilitis is far reaching in its effect on the human system, in its occurrence in individuals, has been well recognized. That the tonsil affords an avenue for infection to invade the system has been apparent to many pathologists as well as clinicians for some time.

Recent observation, have attracted the attention of a number of physicians to the fact that acute nephritis occurs as a sequella of follicular tonsilitis in a much larger percentage of such cases than had been recognized, or even supposed, by the profession.

When we take up the literature, even the latest, on the subject of acute nephritis, following, or as a sequella of follicular tonsilitis, we are forced to recognize that the information is very meager and that the recognition of the occurence of this disease has been practically ignored and unrecognized by the profession.

The text ·books, even the great systems on practice, up to the present time, only meagerly mention the occurrence of this disease as a postible sequalla; dismissing the reference, in merely a mention under Follicular Tonsilitis.

Recently, Dr. Laub in an excellent article relates the clinical course of four cases which came under his observation. The first of these practically without his suspicion of the probability of the existence of such conditions. His attention having been attracted by the recognition of albumen in a case of acute follicular tonsilitism which he was anxious to make full clinical observation and not from any suspected indication.

Dr. Arthur W. Bingham, relates a case in which an attack of Acute Nephritus followed a case of mild follicular tonsilitis. This developed ten days after the beginning of convalescence of the tonsillor attack.

The writer of this editorial article was recently surprised it this same manner by a mild case of acute follicular tonsilitis that he was treating. In the midst of the attack specimen of the urine voided by the patient, was brought to him by a member of the family on account of its very dark looking appearance, and subjecting it to a test for albumen, found at least 33⅓ per cent. of that pathological constituent. Going to the literature for information of such occurrence or complication, he was agreeably aided by the article of Dr. Laub, previously mentioned.

The evidence of the few recent writers in their observations of this disease, as a sequella of follicular tonsilitis, shows the absolute necessity and duty of every practitioner, whether in general practice or as a laryngologist, to observe the condition of the kidneys and as an iron clad rule to examine the urine in every case during the attack and for some weeks after the convalesence has commenced in the disease of the tonsils. This disease should be considered in the routine with scarlet fever rheumatism etc., respecting the watch over the kidneys. By such measures cases of acute nephritis will be recognized at its inception and the proper treatment and care will be instituted at once and thus the patient will be put in the best environment for the eradication of the disease, besides taking advantage of preventing an acute case from becoming one of chronic nephritis. Dr. Laub says: "The heart and urine, in tonsilitis, should therefore be examined as carefully as in rheumatism and scarlet fever and the examination kept up for a time during the convalesence."

In the opening of his article Dr. Laub says: "I. Acute nephritis is a frequent sequella of tonsilitis." "2. This is overlooked in practice by a large majority of practitioners." In concluding he says: I. Acute nephritis results from acute tousilitis far more frequent than is generally believed." "2. The nephritis is of the hemorrhagic type and differs from that of scarlet fever, in that pyrexia, oedema and oleguria are not marked symptoms of this disease."

This editorial article is written for the purpose of calling the attention of the general practitioner to the possibilities of the frequent occurrence of this involvement of the kidney in these cases of tonsilitis, so that each one will be on the allert for the first indications of this disease and also to show the value of making a chemical examination of the urine in every case.

Especial emphasis may also be here laid

1. The Journal A. M. A. Nov. 12, 1910, p. 1705.
2. Archives of Pediatrics, Dec. 1910 p. 917.

on the importance of each physician instructing the patient and those responsible, of the possibility of this sequalla, so that he may be apprised of the first indication of any abnomal appearence of the urine.

CHIEF FUNCTION OF THE NOSE.

Little is said in text books about the physiology of the nose. While many diseases are due directly to disordered function of the nasal mucous membrane, many general conditions are made worse by abnormal activities in the nose.

The lung is the principal organ of respiration, the nose is an organ of respiration, too, its chief fuction being to prepare the air for the delicate lining membrane of the pulmonary apparatus.

What is this function? To moisten the respired air; to warm the air; or, at least, temper it to body heat, and the third function is to filter all respired air.

By the covernous spaces in the turbinates or "swell bodies" and the glands in the murous membrane over-lying these areas of vascularity a shower bath of serum and mucus keeps pouring out to saturate the air as it passes through the nasal chambers.

To warm the air is easily accomplished by the imparting of body heat; first by the large quantities of blood in the "swell bodies" and lining walls, secondly by the air eddying around and around the folding and reduplicating surfaces of the scroll shaped turbinates before it reaches the naso-pharynx and the trachea.

The filtering process comes by the sifting out of large impurities by the vibrassae at the entrance of the nostril. Then by the washing out of foreign matter, the dissolving-of much debris by the mucus. But the greatest purifying element is the inhibiting action of the nasal secretion upon bacterial activity and propogation.

Hence the air reaches the post-nasal space moist, warm and largely free from infection, fully prepared for the activities of the lung.

Changes from normal function arise when frequent attacks of Rhinitis bring about obstruction to the free passage of air through the nose. Mouth breathing follows nasal obstruction.

When adenoid growth dams back both air and mucus; when in later year, or adult life, a chronic enlargement of turbinates bodies results from frequent colds and the mucous membrane is thickened, it ceases to functionate.

Then the supplying of moisture and heat is a job forced upon the mucous membrane of the naso-pharynx. The filtering process is put out of business and the whole list of pharyngeal and laryngeal symptoms of abnormol function ensue; sore-throat, hoarseness and aphonia.

The nose is a breathing organ. When the mouth takes upon itself to breath, useful barriers against disease are thrown down and clouds of infected particles float upon the current of respired air to lodge upon the tonsil, the pharynx, the laryngeal surfaces and the bronchial tract. Sooner or later its boneful effect will produce symptoms and definite pathology.

ANNOUNCEMENT AND PRELIMINARY PROGRAMME.

Thirteenth Annual Session of The Tri-State Medical Association of the Carolinas and Virginia to be Held at Raleigh, N. C., Wednesday and Thursday, February 22 and 23, 1911.

Under the Perisdency of Dr. Joseph A. Whie, of Richmond, Va., the Tri-State Medical Association of the Carolinas and Virginia will hold its thirteenth annual session in Raleigh, N. C., February 22 and 23, 1911. Reputable physicians resident of the constituent States and members of their county and State medical societies are cordially invited to attend the meetings, and to affiliate with the Association. Members wishing to list papers for the final program, who have not already done so, will kindly forward their titles without delay to the Secretary, Dr. J. Howell Way, Waynesville, N. C.

The session will be held in the Assembly Hall of the Elk's Club and the Association Headquarters will be at the Park Hotel which will be practically given over wholly to the entertainment of the Association guests during the meeting.

An entertainment at the Capital Club on the evening of February 22 will vary the sobriety of scientific discourse as well as add to the pleasurable features of the occasion.

Of the various society meetings of the three States, as is well known, there are none where a higher standard of papers are presented, where discussions are pitched on a higher plane, or where the social features are more enjoyable. In a word the members of this society meet to work and to play—and they do both with an earnestness and zeal which renders attendance at one of the meetings bring the visitor to another.

Preliminary Programme.

Wednesday, 10 a. m., February, 22, 1911—Call to order in Assembly Room of Elk's Club by Dr. A. H. Royster, Chairman Committee of Arrangements.

Opening Invocation—Rev. W. McC. White, D. D., of Raleigh, N. C.

Address of Welcome—Gov. W. W. Kitchin, of North Carolina.

Response to Welcome—Dr. Archibald E. Baker, Charleston, S. C.

Thirteenth annual session of the Tri-State

Medical Association declared formally opened by Dr. H. A. Royster, and the President presented.

The President's Address—Dr. Joseph A. White, Richmond, Va.

"The Conservation of Sight.—Dr. J. W. Jervey, Greenville, S. C.

"Pain in the Area of the Fifth Nerve Caused by Irritation, Pressure or Pus."—Dr. W. Perry Reaves, of Greensboro, N. C.

"Insults to Digestion."—Dr. M. O. Burke, Richmond, Va.

"The Surgical Treatment of Dyspepsia."—Dr. Stuart McGuire, Richmond, Va.

"Laryngo-Fissure for Non-Malignant intralaryngeal Growth."—Dr. Clifton M. Miller, Richmond, Va.

"Excision of the Internal Jugular Vein for Streptococcic Thrombi."—Dr. J. W. Long, Greensboro, N. C.

"The Possibilities of the Blood-clot.—Dr. Lucien Loften, Emporia, Va.

"Preventive Surgery.—Dr. G. Paul LaRoque, Richmond, Va.

"Some Surgical Suggestions.—Dr. J. E. Rawls, Suffolk, Va.

"A Case of Unusual anl Extensive Injury to the Liver."—Dr. Geo. Ben Johnston, Richmond, Va.

"Cholecystitis: Its Complications and Sequelae."—Dr. A. Murat Willis, Richmond, Va.

"The Diagnosis and Treatment of Tumours of the Breast."—Dr. J. Shelton Horsley, Richmond, Va.

"Cancer of the Face, With Reports of Cases."—Dr. A. E. Baker, Charleston, S. C.

"Recent Progress in the Diagnosis and Treatment of Syphilis."—Dr. A. J. Crowell, Charlotte, N. C.

"Report of Some Cases Treated With 606."—Dr. Lawrence T. Price, Richmond, Va.

"The Golden Years."—Dr. Thomas W.. etaoin

"The Golden Years"—Dr. Thos. W. Murrell, Richmond, Va.

"Operative Treatment of Simple Fractures."—Dr. Joseph Graham, Durham, N. C.

"The Surgery of the Thyroid Gland."—Dr. John E. Cannaday, Cahrleston-Kanawha, W. Va.

"Does Appendicitis Cause Dysmenorrhoea?"—Dr. Chas. R. Robins, Richmond, Va.

"The Surgical Relationship Between Uterine Fibroids and the Loss of Cardiac Compensation."—Dr. R. L. Payne, Jr., Norfolk, Va.

"The Symtomatology of Amoebic Infections."—Dr. Wm. Allan, Charlotte, N. C.

"The Necessity for the Establishment of Additional Strictly Medical Hospitals."—Dr. J. Allison Hodges, Richmond, Va.

"Commercialism Pervading the Medical Profession: The Style of the Man, and the Remedy."—Dr. A. Bascom Croom, Maxton, N. C.

"X-Ray Diagnosis."—Dr. A. L. Gray, Richmond, Va.

"A Typical Onset of Typhoid Fever with Report of Cases."—Dr. J. McCaw Tompkins, Richmond, Va.

"Nervous Disorders and the Neurologist in Relation to the Profession and the Public."—Dr. Tom A. Williams, Washington, D. C.

"Mental Hygiene in Children."—Dr. Paul V. Anedrson, Morganton, N. C.

"A Consideration of Sudden Death in Some Medical Diseases."—Dr. A. G. Brown, Richmond, Va.

"Immunity."—Dr. Ben K. Hays, Oxford, N. C.

"Stone in the Ureter."—Dr. Robt. C. Bryan, Richmond, Va.

"Report of Cases."—Dr. J. S. Irvine, Danville, Va.

"The Treatment of Poliomyelitis with Special Regard to the Prevention of Deformity."—Dr. Beverly R. Tucker, Richmond, Va.

"A Report of Nine Cases of Pulmonary Tuberculosis Treated by Compression of the Lung."—Dr. Mary E. Lapham, Highlands, N. C.

"The Functions of the Ductless Glands."—Dr. H. Bascom Weaver, Asheville, N. C.

"Pregnancy Following Complete Removal of One Ovary, and at the Same Time the Major Portion of the Opposite One."—Dr. J. Ernest Stokes, Salisbury, N. C.

"The Medical Treatment of Ingrowing Toe Nails."—Dr. Stephen Harnsberger, Catlett, Va.

"Multiple Adenomata of the Rectum, with Report of a Case."—Dr. E. H. Terrell, Richmond, Va.

"The Early Diagnosis of Carcinoma of the Uterus."—Dr. Frank H. Hancock, Norfolk, Va.

"Gonorrhoea in Women."—Dr. Richard N. Duffy, New Bern, N. C.

"Rheumatism."—Dr. John N. Upshur, Richmond, Va.

Dr. Tom A. Williams, Washington, D. C.

"Some Misconceptions About Neuritis."—

"The Doctor's Burden: A Plea for the Chronics (Medical)"—Dr. John C. Walton, Richmond, Va.

"Are We Menaced by Race Suicide?"—Dr. Thos. E. Anderson, Statesville, N. C.

"A Report of Fourteen Cases of Vasectomy in the Mentally Unsound with Beneficial Results."—Dr. Chas. V. Carrington, Richmond, Va.

"Obstructions of the Bowels."—Dr. A. Barnes, Hooe, Washington, D. C.

EDITORIAL NEWS ITEMS.

Dr. F. T. Meriwether, of Asheville, N. C., who has been seriously ill for several weeks, we are glad to learn is improving. He has been suffering from blood poisoning, the result of operating on an infected case.

At the last meeting of the Durham County (N. C.) Medical Society, the following officers were elected: Dr. Wm. A. Graham, President; Dr. A. Cheatham, Vice-President; Dr. L. S. Booker, Secretary and Treasurer.

The following card has just been issued:

"Dr. Addison G. Brenizer Begs to an-

nounce that he has taken offices at 902-904 Realty Building, Charlotte. N. C., supplemented by a general laboratory, and that he will confine himself to the practice of surgery and diagnosis."

Dr. Brenizer is a young man of great professional ability, and we feel confident that he will do well in Charlotte.

At the December meeting of the Gaston County (N. C.) Medical Society, the following officers were elected: President, Dr. J. H. Jenkins, Dallas, N. C., First Vice-President, Dr. McG. Anders, Gastonia, C. C., Second Vice-President, Dr. Robert E. Rhyne, Mt. Holly, N. C. Sec. and Treas., Dr. T. C. Quicked, Gastonia, N. C.

The post-operative use of the Leucodescent Therapeutic Lamp is one of the niceties of modern surgery. It contols pain, keeps the wound aseptic and hasteus the reparative processes. Applied a few hours after an operation, it will remove to a large extent the diffuse soreness of the tissues; affording great relief, and will promote rapid union. It should be available over every operating table and in every well ordered hospital.

Investigations have been carried on by bacteriologists to discover the bactericidal powers of Leucodescent light. A number of pathogenic and non-pathogenic organism were brought under the influence of a 500 c. p. Leucodescent, with results which demonstrate strong germicidal powers. Bacteria were planted on fresh culture media and placed for varying lengths of time and at various distances from the lamp. It was found that the bacteria and the spores also were destroyed.

The Leucodescent Therapeutic Lamp embraces three distinct physical modalities; radient heat, luminous rays and blue-violet or chemical rays. Recent improvements have made possible the use of these thermic nutritional and chemical rays separately, by means of color screens, these giving the Leucodescent, Therapeutic Lamp a larger field of indication than any other physical modality.

Manufactured by The Leucodescent Company, 45 Randolph St., Chicago, Ill.

The January meeting of the Chattahoochee Valley Medical Association was held in Columbus, Ga., on January the 10th.

Among some of the most interesting papers read were the following.

Vaccine Therapy, with Special So-Called Surgical Tuberculosis—By L. M. Gaines, M. D., Atlanta, Ga.

Puerperal Sepsis—from a general practitioner's standing.—By H. S. Bruce, M. D, Opelika, Ala.

Some uses of Normal Saline Solution.—By V. H. Williams, M. D., West Point, Ga.

Cerebral Tumor, with report of a case.—By L. W. Johnston, M. D., Tuskegee. Ala.

Some thoughts on the management of Typhoid Fever. By W. W. Stevenson, M. D. Roanoke, Ala.

Dysmenorrhea.—By J. R. B. Branch, M. D., Macon, Ga.

Review of Fifty-Two Consecutive Operations for fibroid tumors in the Uterus.—By Edward G. Jones, M. D., Atlanta, Ga.

A consideration of the Brain in reference to intellectuality.—By W. H. Hudson, M. D.. Atlanta. Ga.

Habitual Constipation.—By G. M. Saliba, M. D. Roanoke.

Fracture of the Clavicle —By W. D. Gains, M. D., LaFayette, Ala.

Conservative Surgery of the Ovary.—By F. K. Boland, M. D., Atlanta, Ga.

Rheumatism.—By W. G. Floyd, M. D., Roanoke, Ala.

Chronic Chloecystitis.—By Jas. L. Campbell, M. D., Atlanta, Ga.

Ectopic Cestation.—By R. S. Hill, M. D., Montgomery, Ala.

Phrophylaxis in Surgery.—By Jno. D. S. Davis, M. D. Birmingham, Ala.

Report of Twenty Cases of blood transfusion.—By H. P. Cole. M. D., Mobile, Ala.

Cerebral Hemorrhage affecting the Speech Center.—By J. L. Bowman, M. D., Union Springs, Ala.

Surgery of Ectopic Gestation. — By Gaston Torrence, M. D., Birminghan. Ala.

Local Anaesthesia.—By W. L. Cooke, M. D. Columbus, Ga.

Pneumonia.—By R. T. Dorsey, M. D., Atlanta, Ga.

Some effects of a lost art of the Tongue.—By M. M. Stapler, M. D., Macon, Ga.

Diagnosis and management of Tuberculosis from the Standard of a General Practitioner.—J. P. Motley, M. D., Wadley, Ala.

Starvation as cause of digestive disturbances.—By Jas. S. McLaster, Birmingham, Ala.

Indigestion in Childhood.—C. G. Laslie, M. D., Montgomery, Ala.

Account of visit to Berlin Clinics and a special study of the Ehrich-Hata Remedy 606.—By E. G. Ballanger, M. D., Atlanta, Ga.

Feeding in infantile Gastrio-intestinal indigestion.—By William Wade Harper, M. D., Selma, Ala.

The Thyroid Gland; its disease and treatment.—By L. C. Fisher, M. D., Atlanta, Ga.

The Significance of Ascites.—By W. P. Dickinson, M. D., LaFayette, Ala.

The importance of the Eradication of Hook Worm.—By .H G. Perry, M. D. Greensboro, Ala.

Entero Collitis in infants and young children.—By E. V. Langley, M. D. Camp Hill, Ala.

The significance of Headache and its treatment by the general practitioner.—By Charles O. Williams, M. D., West Point, Ga.

Report of a case of Cardia Spasm.—By C. A. Dexter, M. D., Columbus, Ga.

A New Method of Treating the Opium Habit.—By B. W. Allen, M.D., Columbus, Ga.

Some Remarks on Infantile Convulsions.—By T. C. Hodge, Atlanta, Ga.

Non-surgical treatment of Uterine Flexion.—By W. H. Moon, M. D., Goodwater, Ala.

These papers were thoroughly discussed, and the meeting was very instructive.

The social features of the occasion were most enjoyable.

THE CHARLOTTE SANATORIUM.

Modern Laboratory to Be Used By Entire Profession.

The Charlotte Sanatorium will build, without delay, a clinical and pathological laboratory for special work in connection with diagnosing and formulating courses of treatment, before or after operations for patients in the institution and others who may need analytical work in special or general practice. The Sanatorium has had from its beginning a clinical and microscopic laboratory with Dr. L. B. Newell as analyst. The new laboratory will be designed by Dr. Addison G. Brenizer, with the advice and approval of the medical and surgical staff of the institution, and Dr. Brenizer will be director of this department. The purpose is to have a most up to-date laboratory for guidance in diagnosing a patient's condition, to prepare the patient for an operation and to further guide treatment after the operation, all in the light of the state of the science and art of surgery up to and into 1911. The board of directors of the Sanatorium have given Dr. Brenizer carte blanche to build a surgical laboratory which shall be up-to-date in every particular and in view of his varied and extensive training in European universities and hospitals the board congratulates itself upon this move which it has made.

The laboratory, while it will be a part of the sanatorium, will be directed by Dr. Brenizer in the interest of the entire profession and will be equally at the services of all physicians and surgons.

Messrs. Hunter & Gordon of the Realty building are the architects.—Charlotte Observer, January 20, 1911.

BOOK NOTICES.

Dawn of the Fourth Era in Surgery and Other Short Articles. By Robert T. Morris, M. D., Professor of Surgery, New York Post Graduate Medical School and Hospital. 12mo of 145 pages. Philadeldphia and London: W. S. Saunders Company, 1910 Artistically bound. $1.25 net.

The articles contained in this book have previously been published in Medical Journal. On account of their popularity, the author decided to put them in book form.

This little volume contains twelve articles on different subjects. written from a surgeons standpoint.

It contains a great amount of valuable instruction, and it gives us a great deal of pleasure to recommend this little book to our readers.

Its binding is rather attractive, and the illustrations are above the ordinary.

The Practical Medicine Series comprising ten volumes on the years' progress in Medicine and Surgery under the general Editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology, Chicago Post Graduate Medical school, Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University Medical School, Volume IX Skin and Venereal Diseases, Miscellaneous Topics. Edited by W. L. Baum, M. D., Harold N. Moyer, M. D., Series 1909. Chicago. The year book publishers, 40 Dearborn St.

In this the IX edition of this volume, "Skin and Venereal Diseases" are discussed in the following order: Constitutional Relations of the Dermatosis; Special Dermatorsis; Therapy of the Dermatosis; Radiotherapy and Actinotherapy; Gonarrhea and Chancroid; Syphils and Allied Diseases; Genito Urinary Medicine and Surgery.

This little book will be found to contain much valuable information, and it is with pleasure that we recommend it to our readers.

It contains 245 papes of reading matter, and is attractively bound. Price $1.25.

Obsterical Nursing for Nurses and Students by Henry Enos Tuley, A. B., M. D. Professor of Obstetrics, Medical Department. University of Louisville; Visiting Obstetrician and Lecturer on Obstetrics to Training School for Nurses, Jno. N. Norton Memorial Infirmary and the Louisville City Hospital; member Sloane Maternity Hospital Alumni; Ex-Secretary and Chairman Section on Diseases of Children, American Medical As-

sociation; Secretary Mississippi Valley Medical Association, etc., with 73 Illustrations. Louisville, Kentucky, John P. Morton & Company, Incorporated 1910.

This little book first appeared in 1902. Since that time it has been thoroughly revised and a great amount of the original manuscript re-written.

We consider this volume one of unusual simplicity, and a book that will be of greatest assistance to any surgical nurse. While the volume of the book is small, yet it contains a vast amount of valuable instruction for nurses. The binding is very attractive, the print exceedingly plain, and the illustrations are of a very high grade.

The Practical Medicine Series comprising ten Volumes on the years' progress in Medicine and Surgery, under the general charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology, Chicago Post-Craduate Medical School. Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestesn University Medicine School. Volume VI General Medicine, Edited by Frank Billings, M. S., M. D., Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, and J. H. Salisbury, A. M., M. D., Professor of Medicine, Chicago Clenical School. Series 1910, Chicago. The Year Book Publishers, 40 Dearborn Street.

This volume, which takes up the Infectious Disease is complete in every detail. It is a small volume, and of course the different infectious diseases are not discussed at length, but the principles seem to be very concisely and well arranged. The volume will be found of special advantage to the younger members of the profession.

The little book contains 352 pages of reading matter, with several beautiful illustrations.

Hydrotherapy: A Treatise on Hydrotherapy in general; Its application to special affections; the Technic or Processes Employed; and use of Waters Internally. By Guy Hinsdale, A. M., M. D., Lecturer on Climatology, Medico-Chirurgical College, of Philadelphia. Octavo of 466 pages illrustrated. Philadelphia and London; W. B. Saundars Company, 1910. Cloth $3.50 net.

No subject is becoming prominent among the medical profession more rapidly than that of Hydrotherapy. This method of treatment has been known since Hipprocrates, but never before has it been so much in use as it is at the present time.

As the science exists to-day, supplemented by the use of modern apparatus, it is a powerful aid in Therapentics, rapidly growing in popularity as the knowledge of its technic becomes more widely diffused.

This volume treats the subject very carefully and it is full of helpful information. It is with great pleasure that we recommend this work to our readers.

The binding is attractive, and the illustrations very plain and well put.

International Clinics a Quarterly of Illustrated Clinical Lectures of especially prepared original articles on treatment, medicine, Surgery, Neurology, Peadiatrics, Obstetrics, Gyneacology, Orthopeadics, Pathology, Dermatology, Ophthalmology, Octology, Rhinology, Layngology, Hygiene, and other topics of interest to students and Practitioners. By leading members of the Medical Profession through the world. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, U. S. A., with the collaboration of Wm. Osler, M. D., Oxford, John H. Musser, M. D., Philadelphia, A. McPhedran, M. D., Toronto, Frank Billings, M. D., Chicago, Chas. H. Mayo, M. D., Rochester, Thos. H. Rotch, M. D., Boston, John G. Clark, M. D., Philadelphia, James J. Walsh, M. D., New York, J. W. Ballantyne, M. D., Edinburgh, John Harold, M. D., London, Richard Kretz, M. D., Vienna. With regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels, and Carlsbad. Volume IV. Twentieth Series, 1910. Philadelphia and London: J. B. Lippincott Co., 1910.

Like the preceeding volumes of this work, this is one of great value to the medical profession. It contains original articles written by some of the leading physicians and surgeons of both England and America. These articles are composed of the discussions of some of the most important subjects now confronting the medical profession.

It certainly gives us a great deal of pleasure to recommend this volume of the scyics to the medical Profession.

It is neatly bound, and the illustrations are of a high grade.

The Eclectic Practice of Medicine with especial reference to the treatment of Disease, By Remedies Specifically Directed to the exact Indications exhibited by that Disease in the case Under treatment. Designed for the many Students and Practitioners, who, are now diligently searching for exact knowledge concerning the direct action of Drugs as applied to specific conditions of Disease. By Finley Ellingwood, M. D., Professor of Materia Medica and Therapentics in Bennett Medical College, Chicago, from 1900 to 1907. Professor of Chemistry in

Bennett College from 1884 to 1900; Secretary of the National Eclectic Medical Association (1902—1907); Author of "A Synopsis of Medical Chemistry." Manual of Urinalysis; "Materia Medica, Therapeutics and Pharmacognosy; Editor of the Electric Medical Annual (1889-1891); Editor Ellingwood's Therapentist. In two Volumes bound as one. Volume I published by Ellingwood's Therapentist Publishing Co., 100 State St. Chicago.

The author of this volume has taken advantage of the many suggestions presented to him for changes that might be made in the known methods of treating disease since the publication of the first edition. The manuscript has been carefully revised, and many new chapters added to the first edition. When the first edition of this work was published the author thought best to have two volumes, but later decided to have two volumes, but later decided to have the two volumes bound as one, hence the author has given us in this one binding, the first volume revised as stated above, and also the second volume, which is very complete, and the book as a whole contains an immense amount of helpful reading matter.

We take pleasure in recommending this most excellent work to both medical students and practitioners.

A Comped of the Active Principles. with Symptomatic Indications for their Therapectic use. By Harold Hamilton Bedfield, A. B., M. D., Associate Professor of Therapentics, Bennett Medical College; Professor of Therapentics and Physiology, Reliance Medical College, Chicago. The Clinic Publishing Company, Chicago, Ill., 1910.

This little book does not attempt to tell all there is about Active Principle remedies, but the Author believes that nevertheless, there is a place for a book of this size, which is based largely upon his own chemical experience.

It gives us a great deal of pleasure to recommend this book to medical students, and also to the practitioner.

It is neatly bound, containing 115 pages of carefully indexed reading matter.

The Practical Medicine Series comprising ten volumes on the years Progress in medicine and Surgery. Under the General Editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology Chicago Post Graduate Medical School. Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University Medical School.

Volume V. Obstetrics, Edited by Joseph B. DeLee, A. M., M. D., Professor of Obstetrics, Northwestern University Medical School, with the Collaboration of Herbert M. Stowe, M. D., Series 1910, Chicago. The year book publishers 40 Dearborn Street.

In this, the fifth volume of this series the following subjects are discussed: Part I, Pregnancy; Part II, Labor; Part III, Puerperium Part IV, The Newborn.

This volume on Obstetrics, while small, is one which will be of great value to the medical profession. It contains an enormous number of helpful hints to the profession.

The price of this volume is $1.15. It is bound attractively, and contains 230 pages of carefully indexed reading matter.

Abstracts of the Leading articles of the month.

Elixir de Luxe.

Parke, Davis & Co., announce some important improvements in their line of medicinal elixirs, a line numbering more than one hundred and twenty-five preparations and highly esteemed by physicians on the score of therapeutic excellence. The improvements cited are in manufacturing processes, in the interest of palatability, permanence and physical appearance. They are set forth at some length in the current issue of Modern Pharmacy, from which these interesting extracts are taken:

"Three or four years ago, in the gradual development of our scientific staff, we secured the services of Professor Wilbur L. Scoville, a pharmacist weel known to the country and a man prominent in the field of what has been termed pharmaceutical elegance. Professor Scoville may well be considered an artist in questions concerning odor, flavor and appearance of galenicals. The first task assigned to Professor Scoville was to go systematically and patiently through our entire line of elixirs—regardless of what other workers had done before him, and regardless of what changes were under consideration at the time. He was given carte blanche to go ahead and suggest any modifications and improvements which seemed to him necessary.

"Professor Scoville at once began an exhaustive series of experiments which took him nearly three years to complete. He went over the entire line, improving here the flavor, there the color, elsewhere the odor, and in other instances the permanence of our products. How well he succeeded may be seen by comparing any one of our elixirs with others on the market. It is our honest opinion that there is no other line of elixirs in the United States to-day possessing an equal degree of therapeutic efficiency which will stand up on the druggists's shelves and

retain their physical properties and clearness as long as Parke, Davis & Co.'s.

"During this three years of work we have made hundreds of experimental lots which have been kept under observation for a period of from six to eighteen months. The experiments have included such things as increasing and decreasing the percentage of alcohol, noting the effects of different solvents upon the stability of the elixirs, the increase and decrease in the proportion of the sugar present, and the effects of acids. We have studied the effect upon permanence of the elixirs of using fluid extracts or percolating the mixed drugs direct. The matter of aging and also the use of refining agents such as egg albumen and similar proteid matters have been tested out. The essential oils and perfumes employed have been subjected to careful criticism; many of these have been changed with the idea of getting a better blend or a more agreeable flavor.

"We might sum it up by saying that we have attempted first to make our line more stable; secondly, to improve the physical properties which appeal to the eye; and thirdly, to improve the flavors which appeal to the palate. But we want it understood that in making these improvements we have not in a single instance sacrificed the medicinal activity of the preparation."

The Condition of the Heart in Pulmonary Tuberculosis.

Hay (Medical Press and Circular, London) points out that pulmonary tuberculosis is relatively infrequent in those affected by valvular disease of the heart, and that the converse of this is also true. Tuberculosis disease seems in some peculiar way to inhibit the development of the valvular trouble. In 1898-1907, among 109 autopsies made in the Royal Infirmary, Liverpool, on patients suffering from all types of pulmonary tuberculosis, only 4 per cent. showed evidence of valvular disease of the heart. Brown states that in 8,154 autopsies made upon phthisical patients, 293 were found to be suffering from cardiac disease, which gives 3.5 per cent. Meisenberg found that among all the patients at the Leipsic Clinic from 1889 to 1898, 1.75 per cent. had heart disease, while the percentage suffering from heart disease among those affected with pulmonary tuberculosis attending the clinic during those years was only 1.14 per cent. However, endocarditis may occur as a complication of pulmonary tuberculosis, but in most instances it is either a terminal affection or is due to streptococci or staphylococci and is verrucse in type. Specific tuberculosis endocarditis is of all forms the least common. Tuberculous pericarditis must also be classed as another not infrequent terminal event in pulmonary tuberculosis. It very rarely develops in the absence of tuberculous disease. Elsewhere the author draws attention to the fact that when pulmonary tuberculosis and valvular disease do coincide, the treatment of the two affections is not antagonistic. Rest, which is such an important feature in the management of tuberculous patients, is also an essential to an over-worked heart. In the later stages the usual cardiac tonics should be employed. In the earlier stages there should be complete rest, careful dieting, freedom from emotional excitement, and specific vaccine theraphy when available.

The Action of Apocynum.

Drs. Dale and Laidlaw (in The London Hospital Magazine) have investigated the action of this drug, and their account of it is published in Heart. The active principle recently isolated from Apocynum cannabinum by Finnemore exhibits properties identical with those of the substance obtained from Apocynum andrcsaemifolium by Moore. These are named respectively Cynotoxin and Apocyamarin. Crystalline apocynin has but the feeblest physiological action when pure. The diuretic action of apocynum has earned for it in America the name of the "vegetable trocar." The action is in all respects a characteristic digitalis effect. The Doctors have not yet determined accurately the exact position of the drug in the digitalis series, but they find its vaso-constrictor action is considerably more powerful than that of strophantin; its action on the heart is slightly weaker than that of the latter. On the other hand, it is excreted or destroyed with comparative rapidity, and there is experimental basis for the statement that apocynum is not cumulative in its action. The question whether it is excreted or destroyed within the body remains open for the present. It is thought that the employment of the pure active principle should eliminate the drawbacks which have hitherto restricted the use of this drug, for these are probably due to the presence of other constituents of an irritant nature on the crude extracts. The rapidity with which cynotoxin acts enjoins caution with respect to subcutaneous dosage: it is not suggested what the latter should be.

A Quick Method for Making Differential Blood Counts in Wet Preparations.

Stitt (Philippine Journal of Science) employs the ordinary white blood pipette and Tuerck counting chamber used for making the absolute leucocyte count and, by using a diluting fluid made by adding five drops of Giemsa's stain to 5 cc. of 2 per cent. formalin, is able to make a differential count on the same slide. The difficulty is often met, in making the differential count in the stained smear, that the polymorphonuclears are pushed to the edges of the slide. There is therefor consideraable chance for error.

In the Doctor's method the red cells are practically diaphanous and not disintegrated as they are when acetic acid is used as a dilutent; consequently, it is easy to distinguish the particulars concerning the size, etc., of a particular red cell containing a malarial parasite. He says that blood parasites are perfectly stained by this method.

Pellagra and the Sand Fly.

The Editor of the New Orleans Medical Journal says that the evidence tending to show that pellagra belongs to the class of

insect-borne disease seems to be accumulating.

The latest authoritative contribution on the cause and transmission of pellagra comes from Sambon, who is already well known through, in addition to other achievements, his researches into the transmission of yellow fever.

As we have never been convinced as to the correctness of the corn-meal theory of the production of the disease, it is doubly gratifying to us to learn that Sambon nowhere found evidence that corn was a causative agent. He made investigations in several Italian provinces in which the disease had been endemic for many years, and presents strong testimony bearing out his view that pellagra is a protozoan infection, although no parasite was discovered, and that this infection is transmitted by the sand-fly.

The following facts were proved by Sambon to his own satisfaction, and, we are sure, to the enlightenment of many:

First, pellagra does not occur in the towns, but in certain rural districts, where a sand-fly is to be found; second, the endemic centers of the disease have remained the same since the disease was discoverd in Italy; third, the appearance of the sand-fly and the recurrence of pellagra are coincident, when spring is early and the sand-fly appears early pellagra cases appear early, and vice versa; fourth, where pellagra prevails, whole families are often attacked at the same time; fifth, the arrival of infected persons from a pellagrous district does not cause the spread of the disease in a non-pellargrous district; sixth, while the children, in a given family, born during their residence in a pellagrous district will be pellagrous, those born after the removal of the family to a non-pellagrous region will not be infected; seventh, the disease is not hereditary; eighth, pellagra is not contagious, but is transmitted to the individual by the bite of an infected sand-fly.

All of this will be very gratifying to those who are fond of their grits, hominy and corn-meal cakes, and have been uneasy ever since pellagra has been rediscovered and found to be somewhat prevalent in some sections of the country.

It should lead to further investigation, and especially as to the presence of the sand-fly, where and when cases of the disease are found.

A corroboration of the fact brought out by Sambon should lead to protective measures against the bite of the sand-fly and, if possible, to destructive measures against the sand-flies themselves.

Indication and Contra Indications for Enemata.—Boas (Medizinische Klinik) discusses the efficacy of medicinal injections into to the intestines, and considers that astringent and other medicated enemata do more harm than good, and are liable to induce inflammation and aggravate the trouble. Even plain water enemata are liable to induce or aggravate muco-membranous enteritis, while all disturbances may cease when the constipation or diarrhoea is caused by dietetic measures. In cases of severe constipation continuous irrigation with soapy water and a two-way tube, with the patient on the side or in the knee elbow position, continuing with several quarts or until the water comes away free from fæces, is the most effectual measure for severe, acute, or chronic constipation, far surpassing, in the author's opinion, injections of oil, although he sometimes adds a few hundred grams of olive oil to the water. Under other conditions enemata are of little value unless the lesion is accesible in the rectum, in which case benefit may be derived from protecting powders, such as bismuth. Except with tuberculous or syphilitic ulcerations, he has always found that the process started to heal when treated with a 5 per cent. suspension of bismuth, or the latter insufflted dry.

Dangers Arising from College Athletic Training.

It is not a matter of recent discovety, but a fact fally recognized by well-informed physicians for years that men in training, which makes great demands upon the heart to meet the demand of extreme exertion, developes dilitation of the cavities of the ventricles of the heart. When such exercise is carried on systematically, there is a coincident development of hypertrophy of the walls of the ventricle. A condition of cardiac hypetrophy with diliatation once developed, when followed by a sedentary life, is certain to gradually lapse into a condition of cardiac dilitation without hypertrophy; one of the most dangerous of heart lesions.

The records of the past year contain numerous victims among men who had been upon college athletic fields or rowing teams.

A young college graduate who had been for three years upon a rowing team of one of the American universities, after three weeks of inactivity and during rest, exhibited a blood pressure of 150 mm. with a marked cardiac hypertrophy. A business man, who had been on the rowing team of another university died at forty years of age from cardiac dilitation without hypertrophy. Recent press records report the death of the captain of the Cornell football team from "acute cardiac dilitation," reported not to be due to the football game. The statement that football was not tho immediate cause is absurb, unless he had previously developed the condition.

There is probably no greater injustice done to young men than the injurious process of ovestraining in athletic clubs and

colleges for athletic prizes in efforts to break previous records. The medical directors of the athletic associations seem to be blind to the alarming consequences, or otherwise restraint would be put upon these sports. It cannot be urged too strongly upon parents and instructors that the exercise and training in these institutions should be so regulated that the physical demands made upon the youth will not be in excess of the demand of the heart in after life. The young should be warned against the dangers of over development of the cardia —the natural compensation for unusual physical demands.

If the universities during the coming year would give careful investigation to the physical condition of the men under their training, watching with the sphygmomanometer the greater labor performed by the heart during periods of rest after exercise, it would become a well established fact that such physical exertion is creating an extreme cardiac development which is certain in most cases to be out of proportion to the future demands in the ordinary sedontary life of the educated man. Under these circumstances the inevitable result must be a subsequent atrophy of the over developed ventricular muscles with dilitation resulting, which will enfeeble if not incapacitate the man so affected during his fature career.

A sphygmomanometer is as essential to the physician in charge of a gymnasivm as a thermometer to a hospital physician if the future well-being of the men under him is to be considered.—(Journal of Advanced Therapenrics.

Indicenuria; Its Significance, Detection and Treatment.

The physician who is in touch with contemporary medical literature must be impressed with the importance of Intestinal Anto-Tonemie as a causative factor of many diseased and disordered conditions, and of Indicenuria as a diagnostic indiostor of the degree of toxemis from which the patient suffers. Indiosnuris is the term used to denote the presence, in the urine, of indoxyl-potassium sulphate, a decomposition product of indol, a substance generated in the intestine as a result of the action of putrefactive bacteria upon proteid or albuminous material. It is of distinct diagnotic value as an index of the extent of intestinal putrefraction and of the degree of the constitutional absorption of toxic material thus generated. When any appreciable per centage of indican is detected in the urine it is always wise to cut down the proteid elements of the diet, (meat, eggs, etc). In addition to dietetic restrictions, a medicinal combination exercising cholagogue, antiseptic and digestive properties, such as Tablogestin, (Tablets of Chologesti) is extremely useful. This preparation, by virtue of its contained sodium salt of the natural bile acid, (sodium glycocholete) is a true physiologic cholagogue, which materially increases the formation and secretion of the biliary fluid. The natural sodium salicylate (from oil of wintergreen) supplements the cholegogic activity of the bile salt and also serves to liquefy the bile. At the same time, it acts as an intestinal antiseptic. The pancreatin aids in the digestion of the albuminous foods and the sodium bicarbonate adds the necessary alkalinity to the combination. With the physiologic stimulation of the hepatic cells and the consequent increased activity of the liver, the existing intestinal putrefaction is overcome and the absorption of toxic products prevented. The manufacturers of Tublogestin, F. H. Strong Company, 58 Warren St., New York) will be pleased to send formula, samples and literature to any physician requesting same, together with a handsome "Indican Color Scale", with approved test and interpretation. The test for Indican is simple and readily applied.

American Medical Association.

Complaining that the American Medical Association has been run as an "autocratic and despotic corporation," Dr. G. Frank Lydston has begun a suit in Illinois to compel state Attorney Wyman to start ouster proceedings against the trustees of the Association. The chief contention in the suit is that the election at which these trustees obtained office was illegal as it was held in St. Louis, whereas the Association is an Illinois corporation. The Atrorney-General had previously refused to enter into the proceedings, so that a suit to compel him to do so was the only means open to those seeking to oust the trustees.—Medical Record.

Contagion of Syphills by Means of Drinking Cups.

Fournier cites some experiments made with a view to ascertain the part that the communion cup may play in spreading syphilis, tuberculosis, and other diseases. Twenty-seven persons having pulmonary tuberculosis were made to drink out of the same cup. The edge was then wiped with a sterilized tampon of cotton, and this was introduced into the addominal cavity of a guinea pig, which died of generalized tuberculosis, as was shown by autopsy. Again five persons having tuberculosis drank from one cup. This was wiped carefully with a towel. Steralized tampons

were then used to wipe the edges, and they were introduced into the abdomen of a guinea pig, and it also died of tuberculosis. The wine left in the cup after tuberculous persons had drunk from it was analyzed, and it was found that several kinds of bacilli were in it, among them staphylococcus pyogenes, which caused staphylococcic infection in twenty-four hours. These came from the moustache and lips of the patients. It is easy to see from these conclusive experiments how much harm may be done by the indiscriminate use of drinking cups in causing syphilis and other contagious diseases.—Journal de Medecine de Paris.

"606"

Weiler (Neuncheuer Medizinische Wochenschrift) gives an analysis of his cases with full clinical histories of a large number. On the whole the author's results correspond with the many that have already been published, but he contributes a few additional symptoms produced by the injection. Thus he says that several patients complained shortly after the injection of difficulty in urination, and that this condition persisted in one patient for several days. Obstipation was also noticed a number of times. Many complained of a great feeling of thirst, and the appetite was often poor for a few days. He did not notice any notable effect on psoriasis vulgaris, lichen planus, warts, or pointed condylomata. Of the 206 patients treated only forty could be kept under observation, and among these were fourteen recurrences. These cases are described in full. Two patients with tabes were improved in their general condition.

Detection of Simulated Deafness.

Weiss (Clinical Journal, London), mentions Lombard's discovery that people who are completely deaf do not elevate the tone of voice when speaking though loud noises may be made near by and reminds us that individuals whose hearing is not impaired unconsciously raise the voice under similar conditions. The test is made by the employment of a noise apparatus operated by electricity. During the continuance of the noise, if the party being examined possesses normal hearing, the voice is instinctively raised, which may be demonstrated by suddenly stopping the noise. However if the person examined is deaf, notwithstanding the loud noise is made close to the ear, does not speak louder.

On Mechanical Means of Checking Intestinal Hemorrhage.

Kelling (in the Muchener Medizinische Wochenschrift) relates the entire subject of hemorrhage of the primæ viæ. Incidentally he touches on the question of inflation of the colon, in order to secure compression of other portions of the intestine. This is evidently the object of the author's study, although not specifically featured. In pregnancy, he states, the inflated colon readily compresses the stomach. With this as an entering wedge, he has inflated the colon repeatedly for hemorrhagic ulcer of she stomach. The air was injected slowly in a double bag, and the entrance of air controlled by percussion. The air was then allowed to escape and a sand-bag applied to the abdomen. The author's cases three in number, recovered. Since death from hemorrhage often impends in gastric ulcer, some such resource is indicated. Competitive surgical procedures are not mentioned. It is understood that other hemostatics may be applied jointly.

Cesarian Section in the Treatment of Eclampsia.

McCann (Proc. Royal Soc. of Med.) describes in detail a case occurring in his private practice, which he was asked to see in consultation, and regarded as hopeless. After chloroforming the patient, an attempt was made to dilate the cervix, which was found to be elongated, exttemely rigid and undilatable, and the fits recurring with great severity. he emptied the uterus of a dead child by an emergency Cesarean section. She had one fit subsequent to the operation, and made a good recovery. The Dr. then briefly reviews the literature of this method of treating eclampsia gravidarum, and adds that if Cesarean section is to have a place in the treatment, prompt action is necessary on definite indications. The indications given are : (1) When the fits are severe and recur in rapid succession. (2) When labor has not commenced. (3) When the cervix is difficult to dilate from elongation, hypertrophy or excessive rigidity. Too much time must not be spent in such cases in attempting to dilate the cervix. Unless the cervical tissues rapidly yield to the method of dilatation adopted such manipulations tend to increase the frequence of the fits, and unless the manipulations are carefully carried out, there is great risk of septic infection. (4) When the mother is moribund, and the fetus living and viable, (5) When labor has commenced and there is found considerable disproportion between the size of the child and that of the pelvis. (6) When the surrounding of the patient are suitable for a major operation and when the services of an operator skilled in pelvic surgery can be obtained. Should the patient be in an insanitary dwelling and no skilled assistance avail-

able, her interests are best served by adopting an expectant method of treatment. The Dr. regards the classical Cesarean operation as practically free from risk, and preferable to other methods of rapid delivery, including vaginal Cesarean section. The author points out that from what we know of the effect of labor and attempts at delivery on the frequency and intensity of the fits we would expect that method of rapid delivery which involves the least amount of disturbance to the uterus to be the most beneficial. Cesarean section is undoubtedly the one which causes least disturbance, but if it is only tried after other methods have failed, much of its value is lost, for the prolonged attempts at delivery eggravate the disease, makes the patient's general condition worse and diminish her chances of recovery. In concluding his paper the author states that the termination of pregnancy exerts a more powerful and constant influence on the course of the disease than any other method of treatment yet employed.

Treatment of Fractures by Ancient and Modern Methods.

Wheeler in The Dublin Medical Journal says, while speaking on the treatment of fractures by ancient methods that the most antiquated surgical appliances ever discovered, with the exception of some ancient instruments for circumcision were two sets of splints found applied to the bones of two mummies, proved to date about 3000 B. C., in rock cut tombs of the fifth dynasty in Egyt. The first case was that of a girl, aged about fourteen, who sustained a comminuted compound fracture of the middle of the shaft of the right femur. This was treated by the application of one anterior, one posterior, and two laterral splints, fashioned from the midrib of the date palm. It is of special interest that the splints only reached a point about three inches above the site of fracture, although inferiorily they were carried to a level seven inches below the knee joint. The splints were carefully padded with folds of linen bandage. and were held in position by like material tied in reef knots. A single pad was found just below the site of fracture covered with rustlike stains which, notwithstanding the lapse of nearly five thousaud years, had the appearance of remarkable freshness. That these were blood stains is undoubted from the circumstances under which they were found in numerous instances. The pad was probably employedto cover the wound in the soft parts and to control hæmorrhage. The presence of blood was extremely significant, for in ante mortem fractures the broken ends of the bones were copiously stained, and, on the other hand, when a fracture had been produced post mortem by plunderers of a tomb, the blood marks were conspicuous by their absence. The second case, a fracture of the forearm found with splints in situ, was discovered by a strange conincidence in the same cemetery, for together these two cases constitute the only known splints applied to living patients earlier than the Christian era. As in the first case, this fracture was probably compound, for a stained pad of vegetable fibre was found pushed into the medullary cavity of the ulna. Probably the fracture was treated as follows: The wound was first plugged with the pad of vegetable fibre. A bandage (also found in good condition) of much finer material was wound carefully round the forearm, and the splints were then applied. Each had a natural curve, forming with its fellows a tubular casing for the forearm. A gap between the splints at the back was filled in with a bundle of coarse grass. The whole was bound to the arm with a broad linen, secured by tapes of folded bandage. The author concludes that it is clear from the study of these two cases that splints were used by the ancients more as a protection from external injury than as a means of holding the bones in position. This is particularly evident in the first case, where they only reached about three inches above the site of fracture. It is impossible to tell how generally splints were used at these periods in the world's history, but the presumption is, from a study of many hundreds of fractures to which they were found applied only twice, that their employment was extremely limited.

Nasal Reflex Neuroses.

Killian (Deutsche Med. Wchschrft.,) points out the importance of classifying the nasal reflex neuroses under the different headings of ethmoidal, sphenoidal, and olfactory neurosis. Treatment based upon this division may be rendered very successful. These local measures must be governed by the existing type of nasal reflex neurosis. Mixed forms are by no means rare. By testing the hyperesthesia of the nasal mucosa, it is possible to ascertain whether the anterior or posterior region or both, should be treated, and which localities require the most energetic measures. The pure olfactory neuroses cannot be treated by cauterization, in the same way as the ethmoidal and sphnoidal neuroses. Caustic agents are excluded, but a trial may be made with some substance causing a slight and superficial lesion of the olfactory mucosa.

The rational management of the nasal reflex neuroses consists in the first place in

interference with the hyperesthetic areas, for it is here that the reflexes are determined. When this does not suffice, the centrifugal path may be interrupted, but this requires an accurate knowledge of the topographical anatomy.

It is well to keep in mind that the nasal reflex neuroses originate on the bases of hyperesthesia of the nasal mucosa, especially towards those stimuli or irritants which produce a tickling sensation. Where this condition prevails, even very slight and trifling stimuli will suffice to determine local, reginal, and sometimes remote reflexes; and this is apt to lead to the development of a reflex neurosis. A nasal reflex neurosis can develop only upon the basis of a nasal hyperesthesia.

Obesity.

Rozenraad in the London Lancet states that the effect of taking the waters at spas like Homburg or Marienbad would be an ephemeral one unless the patients were taught how to diet themselves afterward. In Homburg great attention is given to dieting; every hotel keeper and proprietor of a lodging house is supplied with the necessary forms of diets, and special cooking is arranged. Some devote themselves exclusively to this dietic task, and diabetes or gout is treated in the same dietetic line. Should a dietectic cure not lead to satisfactory results treatment with thyreoid is indicated, but in many cases thyreoid is advised when the diet alone would have helped the patient, if carried on for a certain length of time. For there are cases in which the retarded metabolism of obesity does hot seem to yield to a dietetic treatment, and patients, though undergoing a course of diet for a length of time, say that they are fed with 900 calories, do not lose weight. These cases are due to a constitutional tendency; and they are cases to be treated with thyreoid. The reduction of weight soon takes place and they remain less obese. During this treatment we have to watch the action of the heart and the pressure of blood, should the pulse increase it would be advisable to discontinue this treatment. The amount of thyreoid to be given, as a rule, is three grains, three times a day during the meals for a couple of weeks. No thyreoid ought to be given in the elimacteric age.

Syphilis, "606".

Certain of the arsenical compounds, including "606," by killing some of the spirochetæ present in the organism, cause the production of antibodies which destroy the remainder. The best curative results are, naturally, obtained when the disease is at its height, when the body is saturated, so to spead, with the specific organisms, since the formation of anti-bodies may play even a greater part in causing their complete dissolution than the direct destruction of a few. In his experiences with the new remedy in 80 cases, the author found that a much larger dose was required to heal an early chancre than to cure completely a case of extensive gummatous ulceration, for instance, in a congenital syphilitic; therefore, he feels justified in assuming that the cure is largely due to the amount of antitoxin formed. If a mother, after giving birth to a syphtlitic infant, be injected with "606," all the syphilitic manifestations disappear within a week after it is put to the mothr's breast. The improvement is not due to the amount of arsenic the child receives, since none is found in the milk; it must, therefore, be due to the antitoxin produced in the mother by the death of her spirochetæ, and which is conveyed to the child by the milk. This is of much importance, since the risk of death in an infant injected with the smallest possible dose of "606" is enormous, owing to the amount of endotoxin formed. We do not yet know whether the cure obtained in a child in this way is permanent, and Ehrlich's advice at present is to give the child an injection later, when it is in a healthier condition.

The remedy should be injected preferably under the trapezius mascle, on a line with the spine of the scapula and midway between the scapula and the vertebral column. Injections into the glutei necessitate recumbency, and, since the pain is often worse in this position than when standing up, patients begin to walk about the room on the second and third day, when suddenly they are seizdd with severe sciatica which may keep them bed-ridden for as long as three weeks, probably due to gravitation of the injection mass downward on to the sciatic nerve. Injecting into the shoulder one is below the brachial plexus, so there is no radiating pain down the arm, and only a very occasional shooting pain down the back and up to the head. Emphysematous patients, however, should always be injected in the glutei, as otherwise difficulty in breathing may arise, owing to spasm of the intercostal muscles on the side injected. The emulsion employed by the author is not more than six cubic centimeters in bulk.

As a prophylactic the drug is powerless, since its constituents are not broken up unless acted upon by the protozoa. In early cases of syphilis where a chancre alone was present, no secondary symptoms ever developed. In the secondary stage it is the

rule for all symptoms to disappear after a single injection of from 0.5 to 0.6 Gm. Very rarely the rash is temporarily increased in severity. The interpretation of this is, that the dose given was too small, and the cases reported did not receive more than 0.3 Gm. In a case of malignant syphilis with added pulmonary tuberculosis, the cough subsided night sweats ceased, and physical signs diminished after an injection of "606." In another case the small recurrent papalar syphilide (lichen syhiliticus), perhaps the most resistent syphilide to mercurial treatment, disappeared in a short time.

The writer lays stress on a group of subjective phenomena which the patient usually does not complain of, but the disappearance of which he calls one's first attention to after the injection, viz.: precordial pain and heaviness, palpitations, cardiac irregularity—in short, a pseudoangina, probably dependent upon an endarteritis of the small vessels. So constant are these symytoms that they should prove of diagnostic value.

Tho risk of optic atrophy from "606" need scarcely be seriously considered. since no case of amaurosis is on record, and the writer injected one case of bilateral optic neuritis without atrophy ensuing, one case of unilaternal optic neuritis, caused by soamin injections, two cases of syphilitic choroiditis, and two cases of syphilitic iritis which healed after a single injection. In parasyphilitic affections the drug will not often be indicated, since both tabes and general paresis are usually too far advanced before treatment is started. If a case is obtained early the result of treatment is really marvellous, as shown in one of the author's cases, in which such spmptoms as diminished knee-jerks, sluggish pupils and slight ataxia were caused to disappear. Three cases of tabes with marked ataxia did not improve under the injection, but foreign reports state that lightning pains disappear under the drug's influence.

Where syphilis is complicared with tubercle, as is almost invariably the case in the malignant form, the injection acts beneficially upon the tuberculous lesions. Secondary infection with streptococci and staphylococci is often cured, along with the syphilitic processes it complicates. On the other hand, the injection does not confer immunity to either variety of coccal infection, since one case developed erysipelas a fortnight after injection, and two or three were subsequently troubled with furunculosis. On gonorrhœa concurrent with syphilis, the injections had no effect either for better or worse.

In a case or leprosy no good result was produced by an injection of "606." One man's death was hastened by the injection, a supposed case of cerebrospinal syphilis, which turned out to be one of disseminated sarcoma. Wassermann's reaction, which the writer advises as a precautionary step before injecting any patient, had not been carried out in this case until after the injection, proving negative. In one case, an alcoholic, delirium tremens commenced on the third day after the injection, though it is impossible to say to what extent the condition was due to the injection or stopping of the alcohol. An emphysematous, plethoric man of 50 developed pleurisy on the side of the injection on the second day. In two cases only did the injection cause a rash. Two cases have recurred; it is probable that in both the initial dose, 0.4 Gm., was too small.—McDonagh in the London Lancet.

Tuberculosis of The Bladder.

In a case of advanced vesical tuberculosis, in which the most powerful local measures had failed to relieve the constant pain and tenesmus, and the patient was rapidly falling into a state of cachexia, the author succeeded in procuring relief without performing a radioal excision of the organ. The bladder had already been entered twice by suprapubic incisions, and on several occasions from the perineum. without improvement. Extensive tuberculous lesions, together with calculi, had been found. A sound was introduced through a perineal incision, and the bladder opened widely from above and packed. No effect was produced on the symptoms. The packing was not well borne, and was replaced by a tube; but this also had to be removed at the end of three weeks. A bilateral lumbar nephrostomy was then contemplated, with total excision of the bladder as a secondary procedure. At operation the right kidney was found extensively diseased and was removed. The left kidney appeared normal. A sound was then introduced through the incised ureter, pushed in toward the inferior calyx, and its external end immersed in a receptacle containing an antiseptic fluid. The operation was not followed by a rise of temperature. The pain disappeared completely and the tenesmus was relieved, owing to the fact that the urinary flow had been diverted from the diseased area. Two weeks later the sound was removed, a satisfactory lumbar fistula remaining. The general condition rapidly improved, the patient gaining 20 kilos (44 pounds) in weight in five months. Excision of the bladder was no longer necessary, and cure of the tuberculous process in this organ appeared probable. The author recommends that in similar cases nephrostomy be performed.—Willems in La Clinique.

Radiotherapeutics of Fibroma Uteri.

In many respects the high hopes that were raised in the beginning of the use of the x-rays, as to the cure of malignant and non-malignant tumors, have not been realized. It is interesting to find an author who claims that a definite cure of uterine fibroids can be obtained by the use of the x-rays provided the applications are begun before the seventh year of the growth. H. Bordier states as a result of his experience in the treatment of uterine fibroids that this is the case. The treatment may be applied in such a way as to give no results, while if the technique described by the author is carefully followed the complete cure may be obtained. Bardachzi obtained a decrease in size, an arrest of hemorrhage, and a rapid improvement of the general condition. The rays cause the cells of the fibroma to atrophy, and the diminution in volume appears even when menstruation is still continued. In some cases the fibroma entirely disappears and the menses continue; this occurs in young women especially, where it is not desirable to castrate or remove the uterus, and where the tumor is small in size. The best effects of the rays are obtained in small fibroids of recent growth. Good results are also to be expected in fibroids reaching to the umbilicus, provided they have been present less than seven years. Small fibroids of any age that are accompanied by much hemorrhage are well affected by the rays. In recent fibroids the regression occurs in four or five months, and the menses grow less and finally disappear. In hemorrhagic fibroids the result is even quicker, atrophy occurring as soon as the Graafian follicles have been affected. In fibromata older than seven years operation is to be preferred to treatment by x-rays. The less potent rays are filtered out and the treatment is given first over the two ovarian regions, and then over the middle line of the abdomen at a point between the pubis and the umbilicus. Every other day the applications are made to the different regions.—La Presse Medicale.

Convulsions in Whooping-Cough.

Schiller reports four cases, (mediziuische Klink, Berlin), in the first of which the convulsions were evidently the result of latent tetany in a female infant, 17 months old, artificially fed. The prompt success of treatment for the spasmophilic diathesis; castor oil, tea, phosphorus-cod liver oil and abstention from milk, with symptomatic measures, confirms the assumption of tetany as the cause of the convulsions, the whooping-cough having continued its course unmodified. In the second case the convulsions were merely a casual coincidence, ushering in severe varicella with otitis media. Measures directed against the fever, cold packs and aspirin, banished the convulsions. This patient was a boy of 3. In the third case the infant began to cough when 4 days old, and at three weeks the closure of the glottis initiating the cough frequently persisted, causing dangerous asphyxia from the laryngospasm. The trouble in this case was an actual complication of the whooping-cough, peculiarly dangerous on account of the suffocation recurring without warning and liable to prove fatal unless the child was watched incessantly. In the fourth case a mustard pack was applied on account of beginning bronchopneumonia in an infant nearly two years old, with whooping caugh for six weeks. The child was otherwise healthy, but six hours after the mustard pack, applied according to Heubner's technic, severe convulsions developed, with cyanosis, requiring artificial respiration and rapidly exhausting the child, with high fever and death from heart failure the next day. Ibrahim recently reported fatal convulsions following the mustard pack in a case of whooping-cough. If Schiller had known of this experience he would have applied lumbar puncture in his case to counteract the heat congestion from the mustard pack, superposed on the febrile tendency of the incipient bronchopneumonia.

Curability of Cancer Under Palliative Measures.

Bretschneider believes (Archer fur Gynaekologie, Berlin), that the prognosis of cancer in the so-called hopeless cases should be guarded, as instances are not lacking in which an apparently incurable growth subsided under merely palliative measures. The doctor reports a typical case of the kind, a woman of 53 having a supposed inoperable carcinoma of the uterine cervix, but is was so favorably influenced by repeated palliative operations that at present there is not a trace, either macroscopic or microscopic, of malignant disease at the spot, and the metastatic foci have evidently been arrested in their growth and have partially retrogressed. The general health of the patient is normal and she has no disturbances of any kind. The clinical cure is thus complete, although she still carries numerous cancer foci: the carcinoma cells seem to have lost their proliferating capacity and the foci have become latent. When first seen, suspicion of kidney disease and dilation of the left ventricle complicating the inoperable adenocarcinoma rendered the outlook very grave. After curetting and cauterization with 50 per cent. zinc chlorid there was some collapse, requiring camphor and heart tonics, but the patient was dismissed from the hospital in two weeks. She returned seven months later in very good general condition and the cancer had materially subsided. The same technic was applied again and with good results. Four months later she returned on account of hemorrhages and the cancer was then deemed operable, but at the laparotomy the peritoneum was found studded with cancerous nodules, and nothing further was done, as the diffuse peritoneal carcinosis had destroyed all hope of success. The cervix cancer was merely curetted and cauterized as before. A year later, two years after the first excochleation, the patient was seen again, the aspect was that of perfect health for her age, 55. There had been no further hemorrhages, and the cervix presented merely the

usual senile aspect. There are no records, he adds, of the necropsy findings in such cases of unexpected clinical cures of cancer, but there is nothing theoretically to prevent the assumption that carcinoma foci may completely retrogress. There is evidently a constant battle between the defensive forces of the organism and the proliferating forces of the carcinoma cells. Changes in the blood, as after fever or profuse hemorrhages, and possibly after deep cauterization of the focus, seem to exert sometimes a favorable action on the malignant foci. When the balance between the defences and the cancer cells is maintained and neither is victorious, the cancer is kept in a latent stage, but at any moment when the defensive forces are weakened by any cause the cancer may get the upper hand. Such an assumption would explain the late recurrence of cancer after a long period of latency. The case reported and others on record, indicate that the defensive forces of the organism are powerfully seconded in their struggle with the cancer cells when the latter are vigorously cauterized or are affected in some other way. There are evidently factors still unknown to us at work in these cancer cases, and something is liable to turn up that will unexpectedly diminsh the proliferating capacity of the carinoma cells and thus induce a turn for the better. Such a possibility should always be borne in mind in the management of inoperable cancer, and the prognosis should not be so grave as to drive the patients into the hands of quacks, especially as the latter are liable here and there to get the credit of the unexpected turn for the better which may occur at any moment.

Venous Thrombosis.

Bennett in the British Medical Journal says that the two main factors in the occurrence of this condition are the state of the blood on the one hand and the state of the vessels in which the blood circulates on the other. It seems at first sight that acutal surgical treatment of thrombosis is narrowed down to a somewhat limited application, for the ideal case must be one in which clotting is local and limited, and if in a case in which recurrence has happened, the thrombosis must be in the same place, or at all events in the immediate neighborhood of the original attack. Under those circumstances there is no doubt that the tendency to recurrent thrombus can generally be obviated by removing the abnormal veins which originally excited the clotting of the blood in that situation. There are two sorts of thrombi which are dangerous. One of these, which the author calls "creeping thrombus," occurs in some superficial vein and gradually travels towards the central parts. The other dangerous condition is in connection with the detachment of emboli. Both of these types are at times amenable to surgical treatment. If a thrombus is found to be traveling quickly, and seems to take less notic than usual of these vavvular stops, it is without doubt the best thing for the patient that the vein should be at once interrupted on the proximal side of the clot, in order to prevent its progress upward. In the case of thrombosis in a varicose vein the proper procedure is the interruption of the vein above the upper margin of the clot, keeping well clear of it, by dividing it between two fine catgut ligatures if there is sufficient room for so placing them, the thrombosed portion of the vessel being at the same time removed if it is not too extensive. When a thrombus occurring in a superficial vein is obviously septic it should at once be removed with the portion of the vein involved. The most striking example of the effects of well-advised operation in thrombosis is sometimes seen in cases, usually septic, in which a thrombus is giving off emboli of the grave peril of the patient. Operative treatment of thrombosis with embolism must, excepting cases in which the internal juglar vein is concerned, be limited for the most part to superficial veins. Thrombosis occurring in a normal vein is always more or less serious. On the other hand, in veins which are sacculated or pouched a clot may form which is of little importance, apart from the discomfort which it causes and the occasional liability to localized suppuration. The most interesting point in this respect is the frequent occurrence of harmless clots in the veins of old people, especially in the legs. As to the best means of promoting rapid resolution of clot, although various methods have been advanced with confidence, the author finds the older plan of compresses of lotio plumbi cum opio locally with the internal administration of iodide of potassium or sodium with alkalies and a minute dose of opium, accompanied by the free consumption of fresh lemon juice, the most satisfactory measures. The best support for these limbs after thrombosis is a well ventilated bandage of the crepe Velpeau kind, which can be applied without "turns" like a puttee, and can at any time be adjusted to meet the varying tension of the part. A rubber bandage is inadmissible. Speaking generally, the only conditions in varicose veins which can be operated upon with advantage are three—localized thrombus in some pouch potassium or sodium with alkalies and a min the skin about a sacculated or tortuous vessel; and localized pain such as sometimes occurs when a nervous filament becomes stretched or irritated by inflammation or rapid increase in size of a vessel with which it is in relation. In either of these conditions the removal of the portion of the vessels involved is a rational proceeding, which may indeed sometimes be urgently called for. The indications for massage must be carefully studied. If, the patient having been previously in the upright position, when the part is placed in the horizontal posture the dilated veins empty themselves immediately—behaving, in fact, as they would do in an ordinary case of varicose veins—massage may be used with impunity.

The Representation of Hypertrophied Prostate by the Skiagraph.

Burckhardt and Floercken (Deut. Zischr. f

Chir), say that the condition of the middle lobe and the anatomical relation of the hypertrophied prostate to the bladder often make the diagnosis difficult. Palpation through the rectum, as a rule, fails completely, and the use of an inflexible sound often fails to give reliable information. The use of the cystoscope is rendered difficult by the projection of the prostate into the bladder and by the presence of infection. These writers have already called attention to the value of filling the bladder with oxygen for cystoscopy and radioscopy. It is striking how distinct in form and size foreign bodies in the bladder are shown on the x-ray plate when oxygen is employed to fill the bladder beforehand. This is accomplished either with a catheter directly from the exygen tank or by means of a 3 per cent. peroxide solution in a flask with potassium permanganate added. From the flask the developing oxygen is passed through the catheter into the bladder. The introduction of the exygen is stopped as soon as the filling of the bladder is indicated by a feeling of slight tension on the part of the patient. The bladder should be emptied thorcughly before it is filled with the oxygen. A two-way catheter may be employed with one way closed until the oxygen is being introduced, when through the other opening any fluid in the bladder may be slowly evacuated. The Skiagram then taken with the use of a compression apparatus will give very distinctly the exact contour of the bladder and any change in it produced by a projecting portion of the prostate at the neck of the bladder. Six illustrations are given, showing very well the effect of the exygen in outlining the limits of the bladder and the isolated hypertrophy of the middle lobe. This method may be of advantage in deciding the operation to be performed.—(Ibid.)

A Note on the Crepitations Heard in the Third Left Intercostal Space in Some Cases of Mitral Stenosis.

Cunnington (The London Lancet) says that if a large number of patients suffering from mitral stenosis be examined, a certain small proportion of them will reveal the presence of crepitations in the third intercostal space on the left side. This fact does not appear to be noted in the text-books, but it seems worthy of notice, because there is some risk of a hasty diagnosis of pulmonary tuberculosis being given unless the observer bears in mind the possibility of this phenomenon. It is, indeed, not uncommon to find such a mistake made. The number of cases in which the sign is present form only a small percentage of all these with mitral stenosis examined.

The patch of crepitations is quite limited, being seldom larger in area than what would be covered by a halfpenny piece placed over the third left intercostal space close to the sternal margin. Barely does it extend down to the fourth space or upwards into the second. That the crepitations are formed in lung tissue is proved by their disappearance while the breath is held. They are heard only during inspiration. They are found more frequently in women than in men, as would be expected from the greater frequency of mitral stenosis in the former sex. I am disposed to associate their occurrence with the thin type of mitral stenosis patient rather than with the stout, but one has to remember that most patients with this disease are thin.

These crepitations are by no means constant in any particular case, and may be present one day and absent another. It would seem that they are more likely to be present when the heart is particuarly distended; thus they may be found at a patient's first visit, and after a week's treatment with digitalis they may have disappeared, reappearing when at a later date the heart is again laboring under the strain of overwork. On the other hand, I have noted their presence in some cases where compensation is, apparently, perfect. I have myself never heard these crepitations in cases where the lesion is other than mitral stenosis, or, indeed, where that lesion is complicated by a second. Thus, one would not expect to find them in a patient with "double mitral."

It is not possible to be certain about the cause of this phenomenon. That it is not due to tuberculosis is fairly certain. Firstly, other signs and symptoms of tuberculosis are absent, nor is any evidence of it to be found on x-ray examination. Secondly, the crepitations are evanescent, do not spread as time goes on, and are strictly limited in position; moreover, the concurrence of pulmonary tuberculosis and mitral stenosis is a clinical rarity. One is compelled to conclude that they are due solely to the condition of the heart. In mitral stenosis the left auricle is distended and there is from time to time some pulmonary congestion of a passive nature due to the obstruction at the mitral valve. Now these crepitations are heard over the site of the left auricle, and it is probable that they arise in a small edge of lung tissue pressed on by the dilated auricle or auricular appendix.

The Use and Possible Abuse of Athletics During the Period of Growth and Development.

Murdoch (Edinburg Med. Jour.) mentions the importance of regulated gymnastics along with more strenuous athletic exercise and the fact that it should be attended to at school. Physically, intellectually and morally boys and girls can be benefited. Abuse of atheletics may occur, but is rare and to a large extent preventable. The following recommendations to lesson abuse are given: (1) Medical examination of boys and girls. This would ensure the detection of defects and lead up to (2) their classification for exercise. Physical fitness should form the basis for classification. (3) Proper clothing. Strict rules as to changing and drying of clothes should be enforced. (4) Relation of exercise to meal hours. Hard exercise should never be taken for at least an hour after meals. (5) Special caution as to resumption of exercise after illness. (6) Supervision of exercise by masters. (7) Character of exercise. Military training and cadet

corps, and runs, notably so-called distant and cross-country runs, are especially important.

The Treatment of a Syphilitic Infant by Treating the Mother With 606.

Von Taege (Muench. Med. Wochschr), a patient who had manifest lues, was injected with 0.3 grams of 606 ten days after childbirth. Three days later syphilitic condylomata began to disappear, and spiro-chaetae were difficult to find. The child at birth weighed 2400 grams. It was well developed, but appeared pale, shrivelled, and aged. It did not cry. It was apathetic and would not take the breasts well. On the ninth day pemphigus and paronychia of some of the fingers appeared. At this time the mother received treatment. For two more days the condition of the child continued to become worse, but on the third day after the treatment of the mother all of the symptoms came to a standstill. After this the symptoms began to show a rapid improvement. The grey faded color gave way to a normal red tinge; the infant cried lustily and emptied the breasts.

The manner in which this apparent cure was brought about is difficult to explain. At no time could the presence of arsenic be demonstrated in the milk. A possible exepanation offered by Ehrlich is that the rapid killing off of a great number of spirochaetae in the mother set free endotoxin, which in turn resulted in the formation of an antitoxin. This antitoxin excreted through the milk, resulted in the seeming cure of the child.

A New Theory of the Production of Anesthesia.

Buerker (Muenchener Med. Wchschrft) says that anesthesia is produced by narcotic agents in such a way that these bodies, which are by no means indifferent in their chemical character, become accumulated especially in the nervous system, on account of their great solubility in liquids. However, this accumulation does not suffice, and a chemical reaction occurs through the narcotic agent taking possession of the active oxygen of the nervous substance. The oxygen is thus withdrawn from the nerve-substance, which is extremely arid of oxygen, and the consequence is the temporary asphyxiation of the nerve-substance, combined with paralysis to its physiological function. The products formed in the oxidation of the narcotic agent explain in part the acidulation of the organism, and indirectly account for the increased formation of ammonia which must be interpreted as a process of neutralization. The mobilized and decomposed fats and liqoids may be regarded as the source of the acetone, which is formed in abundance as compared to the normal standard. The altered metabolism in general accounts for the unpleasant after-effects of anesthesia through narcotic agents.

He arrived at his conclusions on the basis of his findings, in electrolytic experiments.

Pelvic Conditions Resulting From Slighter Forms of Puerperal Sepsis.

Sinclair in The Medical Press & Circular of London mentions a cases of "one-child sterility," says that these patients pass through the puerperium without any diagnosis of morbidity. Much harm may be done in the female pelvis with the temperature under 100.4 degrees and without causing greater frequency of pulse-rate than may be accounted for by the excitement due to the physicion's visit. His daily call, also, is usually made in the morning when temperature and pulse are at their best. Slight chilliness, accelerated pulse, slight and not evanescent rise of temperature, sometimes pain, and at times foul-smelling lochia are the symptoms to be noted. Efforts at exact diagnosis by manipulation may do more harm than good. Active treatment must come later. Every woman should be carefully examined within six or eight weeks after her confinement. If subinvolution without complication is discovered, treatment should be at once begun, with the object of bringing the uterus to its normal condition. It may then readily succeed. If uncomplicated retroflexion is diagnosed, the use of tampons, followed by the temporary wearing of a pessary, may possibly be successful. If tampons and pessary fail to restore the uterus to its normal condition and position, adhesions must be suspected, and efforts made to break them down by manipulations under anesthesia. Failing success by manipulation, ventrofixation with the necessary modifications is the only rational operation. In every case of one-child sterility with retroflexion, whatever the negative evidence, puerperal sepsis to some degree should be assumed as the cause, and ventrosuspension resorted to. As the futility of pessary treatment becomes more generally recognized, ventrosuspension will take its proper place as the only reliable and successful method of treatment.

Leukorrhea.

Jellett in The London Practitioner, states that there is an almost universal tendency to consider leukorrhea not as a symptom but as a definite disease, and to think that once the diagnosis of "leukorrhea" has been made the only thing remaining is to try stock remedies. It cannot be too definitely stated that leukorrhea, like every form of pathological discharge, is due to a definite pathological condition; that this condition may be trifling or may be of the most serious importance, and that it is impossible, or almost impossible, to determine whether the condition is trifling or serious unless we first determine its exact nature. For these reasons the writer urges the necessity for a rectal or vaginal examination in order to secure accurate knowledge of the underlying cause. In virgins a rectal examination may be sufficient; but if not, no sentimental reasons should prevent vaginal exploration, with anesthesia if necessary. In the virgin, the most common cause of leukorrhea is cervical erosion in association with endometiris and in some cases with backward displacement of the uterus. Exceptionally, vaginitis may be the cause of leukorrhea, or tuberculosis of the Fallopian tubes if not causing their occlusion, or sarcoma of the body or

cervix, and in later life carcinoma of the uterine body. Uterine myomata are fairly common causes of discharge. In the married woman also cervical erosion with endometritis is the most common cause. This may be the result of laceration of the cervix with or without bacterial infection. Uncommon intrauterine causes are retention of portions of an ovum and degeneration of uterine tumors such as myomata and carcinomata. Second in frequency as a cause of leukorrhea among the married is probably infection of the vulvar glands especially those of Bartholin. This is usually of gonorrheal origin. Next in order is vaginitis. Of extreme importance in either married women or virgins as a cause of leukorrhea is the presence of neoplasms, both benign and malignant. Cancer of the body of the uterus may be suspected from the nature of the discharge, but a positive diagnosis can be made only by the microscopical examination of a portion of the growth removed with the curet. A sloughing myoma of the uterus is occasionally seen. The writer feels that the facts above stated show that any form of routine treatment for vaginal discharge without first ascertaining the cause of the discharge is always absurd, and is sometimes even worse than absurd.

Pelvic Metastases in Cancer of the Upper Abdominal Organs.

Lenormant (Presse Med), says that it is found that in many cancers of the upper abdominal organs, after operation, the apparent cure for some months or years, there is a cancerous involment of the ovaries, bilateral, rapidly growing, and of very malignant type. The question of interest here is in what way the infection was carried from the original seat of the growth to the pelvis. The hypothesis that the cells were carried by the blood is hardly tenable, while that of the lymphatic metastasis has been supported by several authors. An attempt has been made by Kraus and Polano to show experimentally that solid particles, such as india ink, injected into the peritoneal cavity are absorbed through the intact ovarian covering. Another fact bearing on this subject is that meastases to the organs of the posterior culdesac are even more frequent than those of the ovaries. The rectum, especially in men, is often affected in cases where there is no ulceration in the stomach or intestines. The primary tumor may be entirely latent and that of the ovaries be the one for which the patient seeks relief. From these facts we may deduce the practical conclusion that in every case of ovarian tumor we should make an examination of the organs of the upper abddomen before operating, and in every case of cancer of the stomach or pancreas we should examine the ovaries and rectum.

Herpes Facialis in Scarlet Fever.

Rolleston (Brit. Jour. Dermatol) comments on 413 cases of scarlet fever. Herpes facialis was noted in twenty-seven cases, or 6.5 per cent., a figure slightly exceeding that found in diphtheria, in which it occurred in 4.2 per cent. of 1370 cases. Scarlet fever comes fourth in the list of acute infectious diseases in which figures of the frequency or herpes facialis are available, following at a long distance pneumonia, malaria, and cerebrospinal meningitis, in each of which occures in about 40 per cent. No diagnostic importance can be attached to herpes facialis in scarlet fever, the eruption being almost equally frequent in scarlet fever and diphtheria, and much commoner in angina due to other causes, in which it was found in 13.1 per cent. As regards the prognostic value of herpes facialis, as in diphtheria, the eruption was more frequent in the severe than in the mild cases, being found in thirteen cases, or 12.6 per cent. of the former, as compared with fourteen cases, or 4.1 per cent. of the latter. In spite of its greater frequency among the severe cases, none of those presenting the eruption proved fatal, so that it cannot be regarded as an unfavorable sign. The possibility of a pneumococcal infection in herpes labialis must not be forgotten, even in the absence of a pulmonary localization.

Congenital Hypertrophic Stenosis of the Pylorus.

Nicoll (The London Practitioner), says that for the excessive mortality rate of this condition surgeons and physicians are equally responsible. The former fail to recognize that for the slighter cases, serious, and in very feeble infants desperate, operative measures are necessary. If a particular food does not is effective. The latter are not fully alive to the fact that for the really severe cases treatment on dietetic and medical lines is futile, and continue it until such enfeeblement is present as precludes all hope of successful operation. As to the diet suitable, no rules of any value can be formulated. Often the food which would appear to be ideally the worst possible succeeds when many of the theoretically perfect fail. Frequent changes are necessary. If a particular fod does not "stay down" after a three days' trial, it should be abandoned for another. 2. If after three weeks' dieting, even in cases of apparently minor degree, vomiting still persists, dietetic treatment should be abandoned, and operation undertaken while strength remains for the ordeal. Vomiting which persists under systematic feeding for three weeks rarely yields to any form of food. The writer feeds his patients on a form of very thin paste made by mixing, with milk, flour which had been baked. If the baked-flour food fails, operation should be resorted to. Dietetic treatment alone is curative in a large proportion of the slighter cases. Its undeservedly high reputation rests on three fallacies: erroneous diagnosis, temporary improvement, and an exaggerated estimate of the mortality attending operation.

Intussusception.

Adams, in The London Practitioner, says that 70 per cent. of his 100 cases occurred in children under one year and that the commonest age period was between six and nine months. Sixty-six per cent. were boys. That

intussusception is not more common during the prevalence of "diarrhea and vomiting" than at other seasons of the year is shown by the fact that fifty-seven of the cases belonged to the first six months and forty-three to the second half of the year. Probably the influence of diet, if any, is due to the addition of undesirable solids to a previously fluid food. In only four cases was there a history of attacks of diarrhea and vomiting prior to the intussusceptien, but constipation had been notted in twelve. In only one case was there a history preceding traumatism. Of the symptoms of intussusception pain is the most constant. It was absent in only one case. Vomiting was recorded as present in ninety, absent in six cases. Blood, usually accompanied by mucus, was passed in 83 per cent.,. but in children under one year of age the percentage reached 92. Constipation was present during the attack in 33 per cent., diarrhea in 13, abdominal distention in only 22. Localized rigidity over the tumor is not uncommon, so palpation under chloroform is often necessary. The presence of an abdominal tumor is the essential sign of intussusception. It may be felt in any part of the abdominal cavity. Of these 100 cases sixty--eight possessed a tumor which could be easily felt, nineteen required the relaxation of an anesthetic to reveal it, while in twelve no tumor could be found, but eleven of these did not have chloroform administered for the sake of palpation, most of them being too ill for any interference. Rectal examination should be a routine measure in all acute abdominal diseases. Its value is shown by the results in the writer's 100 cases: in twenty-seven the apex of the intussusception was felt; in five others the tumor was revealed by bimanual examination; in a number of the negative cases the examining finger was stained with blood. Ninety-one of the series were operated upon with an operation mortality of 35.1 per cent. In cases where only the simplest surgical procedure was required it was 29.1 per cent., but if more than celictomy and reduction were required it became extremely high. Since any operative procedure further than reduction has a very high mortality, probably the best course to adopt would be to operate under spinal anesthesia in any case where from the length of history, or the gravity of the symptoms, irreducibility or gangrene is suspected.

The Diagnostic and Therapeutic Value of Bismuth Paste in Chronic Suppuration.

Beck, in the Munchener Med. Wochensch gives a most interesting resume of his three years' experience with his method. As it has been so widely adopted in this country, it is interesting to note what the author has to say in regard to its contraindications. Although in a few cases of simple tuberculous arthritis the paste has been injected with success, he would, nevertheless, for the present advise against its use, as in refractory cases harm might result. In this condition the injection of iodoform glycerin emulsion or the Murphy formalin mixture deserves preference. In acute inflammations, such as phlegmons and acute sinus suppuration, the paste in spite of a few satisfactory results, is not to be recommended, as a change for the worse has been noted even in spite of its cautious use. If there is a possibility of particles of the paste entering a vein, it is, of course, positively contraindicated, as even small quantities of vaselin may produce emboli in the branches of the pumonary arteries and a fatal termination. For this reason a sharp needle should never be employed for injection. Bismuth paste treatment is equally contraindicated in cases of biliary and pancreatic fistulae and also in cavities communicating with the interior of the skull.

The Technic for Amputation in Diabetic Gangrene.

Kausch (Munch. Med. Wochensch) does not believe as those surgeons who, in cases of diabetic gangrene are accustomed to amputate a joint higher up than the site of the disease. The Doctor prefers to make his first incision just above the level of the gangrencus area where the skin still appears healthy. If the cutaneous wound does not bleed he incises the skin a little higher up until he reaches a place where bleeding takes place. He then divides the muscles under digital compression of the extremity above the site of operation. If the cuscular tissue bleeds sufficiently, that is to say, if points of oozing are seen, at least one to every square centimeter, and reappear after sponging, this indicates that the surgeon can proceed. It is not necessary that the vessel should spurt, nor that the blood be bright red. The amputation is then completed. Finly, when the patient has recovered, a plastic covering of the stump may be undertaken.

Intestinal Syphilis.

Salomone finds that intestinal syphilis is somewhat rare. It occurs in the form of gummatous deposits which ulcerate and form fistulae and other lesions in the course of their evolution. The symptoms of these affections are not so characteristic as to make the diagnosis easy. They occur in the tertiary stage of the disease. The author gives histories of three cases observed by him. The lesions in the intestines commence gradually in an obscure and subacute form, and become complicated by other serious lesions of the viscera. Diarrhea profuse, chronic, and rebellious tto treatment was a characteristic of all three cases observed. Fever is especially present at night, with headache, profuse sweating, meteorismus, and pain on pressure over the abdomen. The prognosis is dependent on the seriousness of the other visceral lesions. One may have peritonitis, and profuse hemorrhage from amyloid degeneration of the walls of the blood vessels. For a good prognosis two conditions must be present; integrity of the kidneys, and regular function of the cardiovascular apparatus. The duration of the disease is long, covering years. Treatment must be by mercury and iodide of potash used persistently for a long period. Early diagnosis is im-

portant for recovery; all the bacteriological and chemical tests are necessary to exclude other intestinal diseases.—Annali di Medicina Navale e Coloniale.

A SIMPLE METHOD OF REMOVING SEBACEOUS CYSTS.

An incision is made, not over the cyst, but through the healthy skin alongside it, paralled to and the same length as the shortest diameter of the cyst. A small blunt hook is then inserted into the incision and is worked around the cyst, tearing through the adhesions of the cyst wall, first on the superficial aspect, as that is where the cyst wall is thinnest and most liable to burst, and then on the deeper aspect, until the cyst is completely separated, when it can easily be delivered by pressure from above, much in the same way as a cataract is delivered. A dab of collodion on the wound is sufficient dressing.—*Frecth, (British Medical Journal)*.

QUESTIONS CALIFORNIA STATE BOARD OF MEDICAL EXAMINERS, LOS ANGELES, DECEMBER 6-9, 1910.

BACTERIOLOGY.

(Answer 10 Questions Only.)

1. Explain in detail how you would distinguish Tubercle bacilli from other acid fast bacilli.

2. Explain in detail how you would diagnose between Aestivo-autumnal Fever and a general Streptcocci infection.

3. How would you determine the character of a Venereal sore, bacteriologically?

4. What causes Glanders, Influenza, Relapsing Fever, Malta Fever, Sleeping Sickness?

5. How are Bacteria destroyed in the living body?

6. Explain the difference in action of Antitoxins and Bacterial vaccines.

7. Describe the Bacillus Tetani. How does the Bacillus Tetani cause Lockjaw?

8. How would you obtain a culture of Bacillus Tetani?

9. What causes Favus, Ringworm, Thrush, Tinea, Veriscolor, Dysentery?

10. Describe briefly the life cycle of the cause of Malaria.

OBSTETRICS.

(Answer 10 Questions Only.)

1. In the average composition of mother's milk, what is the per cent. of the following: Proteids, Fats, Sugar, Salts.

2. Give the proper formula for preparation of cow's milk to take the place of mothers milk in the new born.

3. What are the dangers of prolapse of the cord and how would you proceed in such a case?

4. How many vertex presentations are there? Name them.

5. Describe tetanic contractions of the uterous during labor and what are the dangers?

6. Give the mechanism of labor in the left occipitoiliac anterior presentation.

7. What do you understand by puerperal pyschosis?

8. Describe distocia due to abnormalties in development of presentation of foetus?

9. In application of the forceps what do you understand by the following: (a) Low forceps. (b) High forceps.

10. How many pelvic osteomalasea complicate labor?

11. Give the aetology and description of cyanosis neanatorium?

12. What puerperal conditions call for uterine currettage and what conditions counter-indicate this operation?

HYGIENE.

(Answer 10 Questions Only.)

1. What method would you employ in controlling an epidemic of small-pox?

2. Give the usual length of quarantine for the following diseases: Diphtheria, scarlet fever, small-pox, plague.

3. Discuss three efficient methods of fumigation for a room of 10,000 cu. ft.

4. Discuss the value of the three most commonly used germicides.

5. Discuss a rational method for the eradication of hydrophobia from a municipality.

6. Outline in detail all the methods of infection in bubonic plague. Give the clinical varieties of the disease and tell which variety shows the greatest mortality.

7. Outline a rational method for the inspection of public schools. What contagious diseases should prohibit a child from attendance. Name at least eight.

8. Describe Pasteurization of milk. What is the effect of pasteurization upon milk?

9. What methods are most efficient for the purification of city water? What diseases may be transmitted by water?

10. What changes may take place in food kept in cold storage? What length of time should be considered prohibitive for such foods?

11. Outline in detail two tests for

sewage in drinking water.

12. What kinds of food may develop Ptomaines and under what conditions?

CHEMISTRY.

(Answer 10 Questions Only.)

1. Complete the following equations:

Table.

2. Name three elements and three compounds in the potassium group with their symbols and atomic weights.

3. Give the chemical formula and derivation of acetic acid. Mention the most important acetates.

4. State of the two chlorides of mercury: (a) their names, (b) chemical formulas, (c) composition, (d) solubility, (e) color and other properties.

5. Discuss acidosis.

6. Give an outline for the tests to be made when the gastric juice is examined.

7. Under what conditions will the Fehling's and Trommer's tests fail to show the presence of sugar in urine?

8. Why is the reaction of the blood alkaline?

9. Which would be the most dangerous poisonous dose of Arsenic, a small or a large dose? Explain.

10. Mention two substances which poison by being inhaled. Name two narcotic poisons.

11. What emergency treatment should be employed for poisoning by Formaldehyde? By swallowing Chloroform?

12. What should be done in poisoning when the nature of the poison is unknown? (a) By what may the effects of a poison be modified?

GENERAL DIAGNOSIS.

(Answer 10 Questions Only.)

1. What are the symptoms and physical signs of incipient Phthisis?

2. What is the normal temperature of the body and describe the temperature curve in (a) Tyhpoid Fever, (b) Croupous Pneumonia, (c) Sepsis, (d) Tertian Malaria.

3. Describe an attack of lobar pneumonia.

4. Upon what symptoms would you base a diagnosis of hemorrhagic pancreatitis?

5. Differentiate Acute Alcoholism from Cerebral Hemorrhage.

6. Discuss briefly the diagnosis of Epidemic Poliomyelitis.

7. Give the diagnosis of Vertebral Tuberculosis.

8. What are the complications which are liable to occur during an attack of Gonorrhoeal Urethritis?

9. Describe an attack of Psoriasis.

10. How is the vocal fremitus elicited? When is it increased? When is it diminished or absent?

11. Describe the symptoms and sequelae of Peptic Ulcer.

12. Define: Paranoia? Hemetemesis? Arrhythmia? Tetany? Opthalmia Neonatorum?

HISTOLOGY.

(Answer 8 Questions Only)

1. Describe the histological peculiarities of a plumonary alveolus.

2. What histological features would enable you to distinguish a section from the cardaic end of the stomach, from one taken from the pyloric region?

3. How do voluntary muscle fibres differ structurally from involuntary muscle fibres?

4. Describe the Epithelial lining of the pelvis of the kidney. Make drawing.

5. What is spematogenesis and how does it differ from karokinesis?

6. (a) What structural peculiarities distinguish a mucous from a serous salivary gland? (b) Name a gland characteristic of each class.

7. Describe briefly a neurone found mostly in the spinal ganglia. Make drawing.

8. (a) Name a structure found only in the kidney. Make drawing. (b) In the spleen. Make drawing. (c) In the thymus gland. Make drawing. (d) In the testicle. Make drawing.

9. Draw a transverse section of a portion of the intestinal tract that has no villi—showing direction of section of various muscular layers—name portion from which section was taken.

10. How would you distinguish a transverse section of the fallopian tube from a similar section from the appendix? Make drawing.

11. Identify slides.

12. Identify slides.

PATHOLOGY.

(Answer 8 Questions Only)

1. Describe the changes which take place in tissue during suppuration and describe the difference between pus corpuscles and white blood corpuscles.

2. Give the most common causes of paresis; its probable uration; and describe the resulting pathologic changes in the brain and cord.

3. Explain what is meant by secondary or Wallerian degeneration of nervous tissue.

4. Describe the changes in the eye caused by Trachema; give cause and probable duration and the condition more or less permanent likely to result; and what class of immigrants are most likely

to bring it to California?

5. Describe the changes in the lung during an attack of pneumonia as a result of Streplococcic infection.

6. Describe the changes which take place during an attack of septic indocarditis and what valves are most likely to be involved and permanently impaired?

7. Describe the morbid condition responsible for the production of indol and indician in the system.

8. Describe the changes formed in the greatly enlarged spleen frequently found in cases of chronic malarial inflection and the reasons for the same.

9. Describe pathologic changes resulting from Beri-beri; its cause, duration, and from what countries is it most likely to be imported?

10. Describe the changes resulting from the inhalation of C O and the reasons for the same.

11. Identify two slides.

12. Identify two slides.

ANATOMY.

(Answer 10 Questions Only.)

1. Describe the Planter Fascia.

2. Describe the mammary and accessory mammary lymphatic vessels.

3. Describe the characteristics of an intercostal space.

4. What are the boundaries and contents of the mediastinum?

5. Indicate, on diagram, the situation of the valves of the heart in reference to the anterior chest wall.

6. What nerves form the brachial plexus?

7. What is the origin, course and distribution of the anterior crural nerve? Use diagram.

8. Give position and blood supply of the thyroid gland.

9. Indicate, on diagram, the position of the stomach with reference to anterior surface of the body.

10. What structures constitute the spermatic cord?

11. Describe the spinal canal.

12. What are the physiologic curves of the spine and what produces them?

PHYSIOLOGY.

(Answer 10 Questions Only.)

1. What is the role of the thyroid gland?

2. What are the nutritive relations of the nerve fibre and nerve cell?

3. What effects do various normal conditions have on the extent of the knee-jerk?

4. What general diognostic significance is credited to the presence, increase or absence of tendon reflexes?

5. What clinical evidences is there that the spinal paths for pain, touch and temperature are separate?

6. What are the functions of the leucocytes?

7. What factors, besides the heart, aid the movement of the blood?

8. What is a sphygmorgram and what general value may it have?

9. Describe a cardiac cycle.

10. What is the myoegnic theory of the heart beat?

11. What is the physical theory of respiration?

12. Describe the specificity of enzymes. To what extent does the stomach show power of absorption? Is the putrefactive process in the gastro-intestinal canal of physiological importance?

GYNECOLOGY.

(Answer 10 Questions Only.)

1. Abdominal section, indications, and contra indications.

2. Preparation for abdominal section. Brief explanation of regular steps, and special procedures.

3. After management of abdominal section, 1st, 2nd, 3rd, 4th days and subsequent orders.

4. Pelvic tuberculosis, what organs are involved, symptoms, diagnosis.

5. Methods of examination of female reproductive organs, for diagnosis.

6. Postural methods, and uses, indications.

7. Ulcers of the vulva. Simple, Chancroid, Syphilitic, Tubercular, Malignant, diagnosis.

8. Pelvic abscess, organs and tissues involved, etiology, diagnosis.

9. What are the ordinary disturbances of menstruation met by the general practitioner; significance?

10. Curetment of the uterus, indications, how performed, dangers.

11. Conservative surgery of the tubes and ovaries, what are the advantages and disadvantages?

12. Inflammation diseases of the vulva (non-specific).

Umbilical Hernia with Cardiac Ectopy.

Kirmisson divides hernia at the umbilicus into three varieties, according to the period of its appearance. Embryonic hernia occurs within the three first months of fetal life, and is due to a failure of development of the ventral plates which never close. Such a hernia has no skin envelope, and is covered by a thin membrane derived from the amnion, an internal serous membrane, and a gelatinous substance between. The liver is often seen in the tumor, which has

no sac. The author reports a case of this variety in which the heart was almost vertical in position. The second type of congenital hernia occurs in the later months of fetal life; it is covered by the skin, and has the regular number of envelopes; it is due to the non-adherence of the ventral plates at the umbilicus. This form is much less serious than the other. In a paper by Berger, 32 operations are cited, with 26 cures and 6 deaths. The third form is the ordinary one that is seen often in weak, premature infants, being of small size, at the navel. Its treatment should be undertaken by placing a proper pad and bandage about the body, to be worn for less than four years at the most. If a spontaneous cure has not taken place by that time operation is in order.—Le Bulletin Medical.

Hay Fever Anaphylaxis.

Hoffmann states that hay fever (better called pollen fever, he thinks) is caused by the absorption by mucous membranes of the nose and the conjunctiva of an albumin from the pollen, especially that of the graminæ. If, however, this pollen can be deposited in the nose of many people without causing hay fever, we must then look for some special disposition on the part of those who do suffer from this disease. He concludes that the disease is due to a supersensitiveness of the mucosa to this albumen of the pollen. This supersensitiveness he thinks is due in many cases to a hyperthyroidism, and in support of this theory he presents the following arguments:

1. Basedow's disease, which is a hyperthyroidism, exhibits the symptoms of urticaria and dermographism. These same supersensiiive conditions are present in hay fever.

2. It is often very difficult to palpate a slightly enlarged thyroid, but we must remember that a gland need not be enlarged to be hypersecretory.

3. Hay fever often disappears after strumectomy. Thyroidin often has a favorable action in hay fever.

4. Gentle stroking of the nasal mucosa in the condition of hyperthyroidism produces vasodilation in the trigeminal area, especially in the conjunctiva.

5. Injections of pollantin causes a reaction in patients suffering from Basedow's disease.

6. The symptoms of acute iodism and of hay fever are very similar.

To combat the vasodilation, Hoffmann formerly gave the fluidextract hydrastis canadensis, but because of its high price he now uses the fluid extract Secal cornut, ana, which also have a favorable influence on the thyroid.—Berlin. klin. Woch.

The Faradic Current in Aphonia.

Johnson reports a case of aphonia of twelve years' duration following laryngitis, and a similar case of more than two years' duration, both of which were successfully treated by means of external faradization. The secret of success lies in the regular and persistent use of mild currents, which are not calculated to produce violent contractions of opposing healthy muscles. Where the laryngoscope shows marked swelling and congestion of the cords the mucous membrane must be attacked vigorously on orthodox lines, and here again one is likely to meet with little success if the nasopharynx is in an unhealthy condition. The author urges the necessity, in any given case, of making sure that the aphonia has really resulted from such simple causes as catarrh, overstrain, or a combinats of both. Thoracic aneurysm, lesions of the central nervous system, malignant growths, the ulceration of syphilis or of tubercle—these must always be borne in mind as sinister possibilities, and it is at least a waste of time to employ faradization in the case of a patient who subsequently dies from cancer or who is in condition to be cured by iodide of potassium.—The London Medical Lancet.

Potassium Permanganate Applications in Smallpox.

(W. Dreyer abs. Semaine Medicale, Aug. 10th, 1910).—The inconvenience of arranging a "bed-room" for the treatment of small pox led the author to try the interception of actinic rays by painting the skin with a solution of potassium permanganate, a substance which, by reason of its antiseptic properties, exerts at the same time a favourable action on the suppurative process. A saturated solution of the salt is used, being painted on all parts affected with pustules. The application is renewed three or four times on the first, and if necessary also on the second day, so as to impart an intense brown colouration; subsequently a daily application is sufficient. The treatment not only reduces the suppuration, but diminishes the decomposion of the pus, and in early cases reduces the suppuration to a minimum, thus curtailing the fever and diminishing the subsequent pitting. Where cardiac weakness exists this treatment should be employed with caution, the use of sodium permanganate being suggested to avoid the danger of potassium absorption.—The London Practitioner.

Hegonon, a New Silver Proteid Compound.

Klingmueller, of the Dermatological

Clinic, Uhiversity of Kiel, Germany, reports the results of his comparative clinical experiments with hegonon and other silver proteid compounds.

The new compound which is obtained by treating albumose with an ammoniacal solution of silver nitrate, is a light brown powder, readily soluable in water, and containing approximately 7 per cent. of organically combined silver. Its aqueous solutions do not coagulate albumen, even on heating, and are not precipitated by sodium chloride. The indications of hegonon are the same as those of other silver proteids. So far it has only been systematically tested in gonorrhea, in which 1-4 per cent solutions have yielded excellent results, recourse to higher concentrations appearing unnecessary. In this concentration the solutions are almost colorless and cause practically no staining.

Of thirty-eight cases of simple anterior gonorrheal urethritis, treated with hegonon, not a single one developed complications (posterior urethritts, prostatitis, epididymitis). Klingmueller also finds that complicated cases of gonorrhea, originally treated with hegonon, show a prompter disappearance of the organism than those in which the other preparations were used. He concludes from his experiments that hegonon deserves ffrst place among modern silver proteid compounds.—Muench. med. Woch.

Injuries of the Semilunar Cartilages of the Knee-Joint.—Kroiss (Beitrage z. klin. Chir.) points to the variable character of these injuries. In the vast magority of cases the injury of the cartilage is complicated by wounding of the ligamentous structures. With displacement and constriction of the cartilage. As regards treatment in recent cases reposition and immebilization are indicated, while in chronic cases partial or total removal of the affected semilunar cartilage is the operation of choice. In some instances fixation of the partially or completely seperated and dislocated cartilage in the normal position by suture has given good results. The former view that extirpation of the semilunar cartilages is not followed by any marked functional disturbance of the joint has not been supported by later observations. Accordingly, complete restoration of function after partial or total removal of one of the semilunar cartilages can be looked for only in a comparatively small percentage of cases. Judging from observations in the Surgical Clinic of Innsbruck, however, this operation should not be discredited, for, although a complete cure cannot usually be expected, because the injury of the cartilage frequently is not the only lesion, the results of extirpation are at least as good as those of fixation by suture, while in the severe cases it represents the method of choice, In general suture of a cartilage should be restricted to cases in which it has not undergone any serious change in form or structure, and does not require a division of important ligamentous structures.

Acute Anterior Poliomyelitis in Adult.—This condition occurs, and attacks are ushered in by evidences of acute general infection. with sharp pains, and a temperature of 39° to 40° C. In a few days we observe the presence of paralysis; it strikes suddenly a great number of muscles, is of the flaccid variety, and the tendon reflexes are abolished. Sensory disturbances are not common, aside from the sharp pains. A period of retrogression, during which many muscles recover their function, while the earliest groups affected remain paralyzed and after this atrophy may occur. Death may reach the patient during the acute infectious period, or by extension, at any time, to the diaphragm. Treatment is at first "hydrique," and then "lacto-hydrique," i. e., plenty of water; and then plenty of milk, and water. Blisters and blood scarification along spinal axis, or leeches so applied are recommended; and counter-irritation should be thought. Some area must be left clear for the application of icebags. if the pain increases. Sixty centigrams of calomel ought to initiate treatment. Ergotine and hydrobromate of quinine with extract of belladonna may be given in pill for ten days. When the inflammation is quite relieved order strychnine and brucine. For tonic effect add the glycerophosphates and some suitable preparation of arsenic. After six weeks of this stimulating regime, some electrical therapy may be instituted. Electrotherapeutic indications are: weak continued currents of from 5 to 12 milliamperes, along the spinal axis according to Huet, and continued currents upon the muscles and the peripheral nerve tracts, with the positive pole upon spine. It is also well to use the weak induesd currents with slow intermittences, which are tonic and trophic. The X-ray, which gives service in multiple sclerosis and syringomyelia, may be employed, but with caution. It seems that the early use of electricity or the Roentgen-ray.—Journal des Practiciens.

Formalin in Ringworm-

Since the introduction of the X-rays treament of ringworm the various antiseptic and parasiticide remedies have fallen somewhat into the background. Dr. Mackinnon, who writes, from Cape Colony,

publishes in the Lancet a brief description of a method in which he has great faith; it seems well worth trial by those who, as he presumably is, are not within the reach of a thoroughly equipped electricat plant. The drug he recommends is not mentioned in latest edition of the standard British work on skin diseases, and practitioners in Great Britain may therefore not be familiar with it. The area of the skin affected is washed with spirit and then allowed to dry. Then with a soft camel-hair brush a 40 per cent. solution of ordinary Formalin is painted on, and the head is meanwhile placed in such a position that the liquid will not run off. According to the author, one such application is sufficient as a rule to effect a cure. but if there is any doubt he repeats the application in five days. There is sometimes some smarting in young children, and the skin often scales off from the irritating action of the drug; but these are only slight drawbacks from a procese which is described as clean. rapid and effective.—The Hospital.

Miscellaneous.

Maryland Examination Questions, June, 1910.

Anatomy.

1. Give a general classification of bones and name a bone in each class.

2. Name structures transmitted through any four of these six foramina: Foramen magnum, juglar foramen, sphenoidal fissure, foramen ovale, foramen retundum, optic foramen.

3. What bones enter into formation of the nasal fossae?

4. Name cavities of the heart and describe the valves.

5. Locate the imaginary lines dividing the abdominal cavity into regions. Name regions and state contents of lower central region.

6. Describe the lachrymal apparatus..

7. Through what arteries is the collateral circulation carried on after ligation of subclavian artery (lower third)?

8. Locate and describe Peyer's patches.

9. What nerves supply the tongue?

10. Give origin, insertion, action and nerve supply of the latissimus dorsi and biceps femoris muscles.

Physiology.

1. (a) What is meant by muscular contraction? (b) What effects has the temperature or veratrin upon muscular contraction? (c) What is the difference between simple and compound or tetanic contraction, and what are the chemical changes in the muscle during contraction and rigor?

2. (a) State briefly the general physiology of the nerve cell and what is meant by the neuron doctrin.

3. What is meant by the knee-jerk? (b) What use are the knee-jerk and spinal reflexes as diagnostic signs?

4. What changes take place during sleep, and what are the neuron and anemia theories of sleep?

5. Give the composition of the blood, its reaction, specfic gravity, temperature, difference between arterial and venous, the amount in the body, and the time required for a complete circulation.

6. (a) What is meant by blood pressure and how determined? (b) What effect has menstruation upon blood pressure? (c) What effect has the blood pressure in the arteries upon the pulse rate?

7. (a) Give the difference in each ingredient between inspired and expired air. (b) The effect of work upon the respiratory movement. (c) The cause of the first respiratory movement.

8. (a) Give composition and specific gravity of the saliva and the gastric juice, and the composition and physiological action of the pancreatic secretion. (b) Which is the only secretion in the body containing a free acid, and what is the acid?

9. State the general physiological importance of bile, and what would be the effect of complete occlusion of the bile duct?

10. (a) Name the nerves of submaxilary gland, and state in full the effect of stimulating each. (b) What is meant by the paralytic "secretion"?

Chemistry.

1. Define (a) chemistry, (b) chemical compound, (c) chemical affinity, and (d) chemical reagents.

2. What does the presence of an abnormal quantity of chlorin in drinking water indicate, and give tests to determine its presence.

3. State the names and the general chemical and physical properties of the "halogens."

4. State of the two chlorides of mercury (a) their names, (b) chemical formulas, (c) composition, (d) solubility, (e) color and other properties.

5. What are normal and deci-normal solutions, and how are they made?

7. (a) State the specific gravity of normal urin, (b) causes of deviations in the specific gravity of urin, and (c) what is the reaction of urin during the formation of phosfatic calculus?

8. Give a chemical test for each of the following, (a) Proteids, (b) phenol, (c) lactic acid, (d) amylum, (e) creosote.

9. State of silver nitrate its composition, properties, and names by which it is known.

10. (a) Give tests and antidotes for nitric acid. (b) What are amalgams? (c) What are "indicators"? (d) Give a brief outline of the differences between "leucomaines" and "ptomaines." (e) What kinds of blood are distinguished and give the differences between them.

Materia Medica.

1. What are alkaloids? What is an infusion? What is a decoction? Define fixt and volatil or essential oils.

2. Give two remedies of the following classes and the doses of each: Galactagogues, sialagogues, emetics, antiseptics, anthelmintics, diuretics, antipyretics.

3. Give six official preparations of iron used internally, and give dose of each.

4. Cinchona—mention the most important preparations and their doses.

5. Arsenic—mention the official preparations and average dose of each. Give the official antidote for arsenical poisoning and how prepared.

6. Name five official acids used internally, and give dose of each.

7. Name three preparations obtained from the animal kingdom, and give source of each.

8. Give six official preparations of mercury, used internally and dose of each.

9. Name five official powders, composition and dose of each.

10. Write me a prescription, using official terms, containing compound tincture of gentian, tincture of nux vomica and bicarbonate of soda. Write one containing reduced iron, arsenious acid, sulfate of strychnin and sulfate of quinin. One containing digitalis, nitrate of potassium, and extract of buchu. One containing pepsin, subnitrate of bismuth, and paregoric.

Therapeutics.

1. Name five antispasmodics and the general indications for their use.

2. Write two prescriptions in Latin, each containing four ingredients, one in dry, the other in liquid form, with directions for administration, and state the condition for which they are to be used.

3. What is an antitoxic serum? Name disease most amenable to serum therapy. Give source of serum and describe method of administration.

4. What are the therapeutic uses of opium? Strychnin? Describe symptoms of poisoning by each.

5. Give the indications for veresction and describe the operation.

6. Give the physiological action and therapeutic uses of colchicum.

7. Give the physiological action, therapeutic use, and effect of overdose and constant use of digitalis.

8. Describe purpose and method of introduction of vaccine lymph into human system and physiological manifestations.

9. Give mode of action of cardic sedatives, cardiac stimulants, cardiac tonics. Name three of each.

10. What is meant by the terms "antagonists," "antidotes"? Describe uses and modes of action.

Pathology.

1. State the method you would use in preparing a specimen of fresh kidney tissue for microscopical examination.

2. State the general principles of the methods used in isolating and identifying bacteria.

3. How would you prepare a specimen of sputum in order to demonstrate the presence or absence of tubercle bacilli?

4. Give the life history of the trichina spiralis and the pathology of a case of human trichinosis.

5. If you were given two specimens of serum and told that one was human and the other bovine, how would you proceed to differentiate them?

Or, what is anaphylaxis, and what alarming symptoms are sometimes due to this phenomenon?

(Answer either one of the above, but not both.)

6. What would you expect to be the macroscopic appearances of the abdominal viscera in a case of typhoid fever dying of hemorrhage in the third week of the disease?

7. State in the order in which they occur the changes which lead from the healthy lung tissue to a healed tuberculous cavity.

8. What changes, not local, may be noted during the course of, and what sequela may follow, an attack of diphtheria? What is the best way to prevent these changes and why?

9. What is arteriosclerosis? What are the common causes leading to this condition? Mention its effect on the heart and kidneys.

10. What changes in the brain may lead to, occur in, and follow a stroke of apaplexy the effect of which is paralysis of the right side?

Surgery.

1. What are the signs of intestinal perofration in typhoid fever and what is the surgical treatment?

2. Describe what is generally known as the radical operation for the cure of cancer of the breast.

3. Describe intubation of the larynx, laryngotomy and laryngotracheotomy. Give indications for each.

4. Give symptoms and treatment of acute catarrhal conjunctivitis.

5. Describe phimosis, paraphimosis, hypospadias, epispadias.

6. Describe two operations for cancer of the stomach.

7. Define the following operations: (a) Enterotomy, (b) enterostomy, (c) entero-anastomosis, (d) enterectomy.

8. Define and describe the following diseases of the hip; (a) Coxitis, (b) coxitis tuberculosis, (c) coxa vara.

9. Describe exastrophy of the bladder, cause, treatment—(a) palliativ, (b) operativ.

10. Describe mastoiditis, acute and chronic, causes and treatment of each.

Obstertics.

1. Give general directions and preparations of the patient for labor and delivery.

2. What anesthetic should be used in labor and the indications for use of each?

3. What conditions demand the emptying of the uterus prior to quickening, and what is the technique of the procedure?

4. What indications require the use of forceps? Give the method of using them, and the dangers of their use to mother and child.

5. What is the mechanism of labor in a breech presentation?

6. Describe Crede's method of expressing the placenta.

7. What are the common causes of hemorrhage during and after labor?

8. Give indications for and method of amputation of the cervix uteri.

9. Give causes and treatment of pelvic peritonitis.

10. What are the dangers to be avoided in performing a dilation of the cervix and curetting of the uterus?

Practise.

1. Define (a) enteroptosis, (b) Ludwig's angina, (c) purpuraa, (d) myxedema, (e) angina pectoris.

2. Define (a) rabies, (b) ascaris lumbricoides, (e) empyema, (d) cholelithiasis, (e) dysphagia, and give some of the causes.

3. Give differential diagnosis between measles and scarlet fever.

4. Give differential diagnosis between serofibrinous pleurisy and pneumonia.

5. Give differential diagnosis between hysteria and epilepsy.

6. Give treatment of a case of typhoid fever and the most frequent complications.

7. Give treatment of early pulmonary tuberculosis, and state in detail what methods should be employed to prevent contagion from such a case.

8. Name types of chronic nephritis and symptoms of each type.

9. What diseases are likely to occur in the right inguinal region?

10. Give symptoms and treatment of gastric ulcer.

General Counsel, State Medical Association of Texas.

EXAMINATION QUESTIONS GIVEN BY THE STATE BOARD OF MEDICAL EXAMINERS OF TEXAS, NOVEMBER 24, 1910.

Anatomy.

1—Give the general classification of bones and name all the long ones. 2—Name the articulations of the occipital bone. 3—Name the muscles of the tongue. 4—(a) What are the anterior humeral muscles; (b) name nerves supplying them? 5—Describe the human heart. 6—Give nerve and blood supply to heart. 7—Name branches of thoracic aorta. 8—Describe the knee joint; (a) bones; (b) levetilages; (c) ligaments. 9—Give a general description of the spinal cord. 10—Name the three great plexuses of the sympathetic nervous system.

Physiology.

1—Give name and function of the eleventh cranial nerve. 2—Give the action and tell where found of the followiug: Enzymes, Ptyaline, Rennin, Steapsin, Lactose, Trypsin. 3—Explain the cardiac cycle. Does the vagus effect both auricle and ventricle? 4.—Give total quantity of blood in body; the per cent that would likely prove fatal in hemorrhage and the best means of regeneration after hemorrhage? 5—Give portion of spinal cord affected and name the nerve through which locomotor ataxia is manifested. Give some indispensable symptom of the disease. 6—Is the assistance of intestinal bacterial action necessary to normal digestion? 7—Give the function of the placenta? 8—What is glycogen, where found, upon what does its quantity depend? Give its chief function. 9—Give three theories of sleep and give some evidence to support the theory you believe to be the most feasible.

Chemistry.

1—Define chemistry and say why it is essential to a medical education. 2—Name the chemical elements entering into the composition of the human body, stating approximate percentage of each. 3—Given a specimen of water for examination, how would you determine that it could be safely used for domestic purposes? What tests would you subject it to? 4—Define an alkaloid and give antidotes to alkaloids in general. 5—Give specfic gravity and composition of cow's milk, stating percentage of component parts. 6—Give in grams the average daily output of solids in urine of an adult, and say how the quantity may be estimated from a given specimen. 7—Give a practical and reliable method for determining the daily output of urea. 8—How would you antidote an overdose of atropine? 9—Define an aldehyde. 10—Give symptoms and treatment for an overdose of cocaine.

Histology.

1—Explain the difference in the histologic structure of veins and arteries.. 2—Describe the histological structure of the tonsils. 3—Give the histological structure of red and yellow bone marrow. 4—Describe the development of bone. 5—Draw a diagram of cross section of an ovary, showing one ripe graafian follicle. 6—Describe tthe histological structure of the skin. 7—Describe the histological structure of the pancreas. 8—Where is unstriped muscular tissue found? 9—What is meant by the terms metabolism, anabolism and katabolism? 10—Of what does the large intestine consist and describe structure?

Medical Jurisprudence.

1—Define expert testimony, privileged communications, dying declarations. 2—How may we determine the time elapsed since death? 3—How may the human blood-globule be distinguished from that from other sources? 4—What is a wound and what are the most important questions that arise in connection with gunshot wounds. 5—How would you distinguish between burns inflicted before and after death? 6—What are the common causes of death following criminal abortion? 7—What changes occur in the foetal circulation soon after birth? 8—What is the attitude of the law toward birth by Caesarean section in case of inheritance? 9—What are the most prominent features of Idiocy, Imbecility, Mania, Melancholia, Monomania and Dementia? 10—What is the legal attitude toward the concealment of pregnancy?

Bacteriology.

1—There are four principles of staining bac-

teria. Name them? 2—What kind of dyes do we use in staining bacteria? 3—Describe the method used in staining tissue and blood? 4—(a) Give an example of a fission fungi? (b) How they multiply? (c) Under what conditions do they sporulate? 5—Saphrophites:—At what temperature do they grow best, and what kind of matter do they feed upon? 6—Give morphology and best stain for the pneumococcus? 7—Bacillus Tetani:—Give characteristics, appearance, how it multiplies and what effect oxygen has upon its growth? 8—Describe the method by which you would detect tubercle bacilli in the urine? 9—Differentiate between the T. B. and the smegma bacillus? 10—How are bacterolitic sera produced.

Pathology.

1—Describe the lesions of the kidney cortex in acute diffuse nephritis? 2—Give the pathology of erysipelas? 3—Give the pathology of diphtheria? 4—What is meant by immunity, and how is it produced? 5—What is the pathology of croupous pneumonia? 6—What do you understand by passive hyperemia? 7—Give the pathological characteristics in carcinoma? 8—Describe in a general way what pathological changes occur in inflammation of a mucous membrane? 9—(a) What is productive inflammation? (b) What is suppurative inflammation? 10—Whaat are varicose veins? Give the causes..

Hygiene.

1—Give general outline for disinfection and fumigation. Give material used. 2—Describe the three large groups into which the different forms of food poison may be divided. 3—What provisions would you make for ventilating a school room? 4—Describe the role of insects in the propagation of disease. 5—Upon what findings would you base an opinion of a sample of milk? 6—Describe prophylaxis against amoebic dysentery. 7—How would you disinfect a room after a communicable disease? 8—What are the dangerous impurities in the air of a crowded and unventilated room. 9—In a system of house plumbing what is a trap? Give construction, location and use. 10—What symptoms are produced in some persons by sudden changes from low to high altitude?

Gynecology.

1—Give clinical symptoms of retroverted womb. Give remedy. 2—Give causes of cystitis. 3—Give operative technique for rectocele. 4—Give differential diagnosis of ovarian cyst and uterine fibroid. 5—What would you do for prolapsus in second degree? Give causes. 6—What effect would the continued use of preventatives have on the reproductive organs and system in general? 7—What effect would excessive child-bearing have on the generative organs and general system? 8—What conditions would justify the use of preventatives? 9—Is married life conductive or not to the health of a woman? Why? 10—When is malignancy of the cervix amenable to medical or to surgical intereference?

Physical Diagnosis.

1—Name six causes for enlargement of the cervical glands. 2—What is a branchial cyst, and how is it distinguished from an aneurism? 3—What is acute anterior poliomyelitis? Give physical symptoms. 4—Give the physical signs of croupous pneumonia. 5—What is ascites, give causes of same? 6—Give six causes for hepatic enlargement. What symptoms are observed in abscess of the liver? 7—Give the local and general or (constitutional) signs of appendicitis. 8—Give six causes for distentions of the bladder. 9—Name some of the causes of jaundice. 10—Name the diseases affecting the peritoneum. Give symptoms of local peritonitis.

Obstetrics.

1—Give causes and treatment of puerperal hemorrhages? 2—What is phlegmasia alba dolens? Give symptoms, frequency of occurrence and treatment. 3—What is hydrorrhoea gravidarum. 4—Give symptoms and treatment of tubal or other extra uterine pregnancy. 5—Give method of procedure in multiple pregnancies. 6—Discuss puerperal eclampsia; its causes and treatment. 7—Give varieties of placenta previa and treatment of placenta previa. 8—Describe and give treatment of the pernicious vomiting of pregnancy. 9—Give causes of puerperal sepsis and outline the treatment. 10—Give indications for use of obstetrical forceps and describe their application.

Surgery.

1—How does inflammation extend? 2—What is terticolitis? 3—How do you treat aneurisms? 4—Should you operate during shock? 5—What is the usual cause of dry gangrene? 6—What tumors are found in the bladder? 7—How do you diagnose hernia from varicocele? 8—What are the symptoms of exophthalmic goiter? 9—Give the differential diagnosis between scirrhus and non-malignant breast tumors? 10—What the the early symptoms of hip-joint disease?

Dr. John B. Murphy, of Chicago, President of the American Medical Association, gave a special clinic at the New York Post-Graduate Medical School, January 6th, on "Bone and Joint Surgery."

American Medical Association.

Complaining that the American Medical Association has been run as an "autocratic and despotic corporation," Dr. G. Frank Lydston has begun a suit in Illinois to compel state Attorney Wyman to start ouster-proceedings against the trustees of the Association. The chief contention in the suit is that the election at which these trustees obtained office was illegal as it was held in St. Louis, whereas the Association is an Illinois corporation. The Atrorney-General had previously refused to enter into the proceedings, so that a suit to compel him to do so was the only means open to those seeking to oust the trustees.—Medical Record.

THYROID GRAFTING AND THE SURGICAL TREATMENT OF EXOPTHALMIC GOIT.

Graves and Joll, Bristol, (*British Medical Journal*) report a case of exoptl.almic goitre in which the symptoms were relieved temporarirly after removal of a lobe of the thyroid on two separate occasions.

After both lobes were removed symptoms of myxoedema developed. A piece of thyroid removed from a patient who was operated for thyroid adenoma was transplanted into the neck, whereupon all the symptoms of myxoedema disappeared. It is of interest to note also that symptoms of tetany which appeared after the exterpation of both thyroid lobes were found to be largely psychical and disappeared after hypnotism. They review the literature of thyroid transplantion fully.

PATROTITIS AN DTHE PUERPERIUM.

Fischer describes a case of unilaterial parotitis occurring twenty-four hours after a spontaneous delivery in a primipara. He regards this as of the same nature as postoperative parotitis, of traumatic origin, in which the fingers of the anesthetist force the jaws apart, causing traumatism. In his patient the author attributes the traumatism to the cries accompanying the labor pains.—*Zentralblatt fur Gynakologic.*

ABNORMAL CASES OF DIPHTHERIA.

Rijo, after describing fifteen cases of abnormal diphtehria, gives the following conclusions: 1. The malignancy of the disease is not always directly related to the production of pseudomembranes. 2. The serum may fail if applied late. 3. A severe toxemia may occur in the first three days. 4. Many cases of apparently benign inflammation of the throat react favorably after serum injection. 5. The serum is so harmless that it should be applied freely as a preventive even in the newly born. 6. The preventive application of serum allows a mother to nurse a diphtheric child at the same time as a healthy one previously immunized.—*Cronica Medico-Quirurgica de la Habana.*

PREVENTION OF INSANITY.

Jones urges that greater interest should be taken in the prevention of insanity, by creating a greater sense of responsibility in respect to all matters pertaining to human parenthood and realizing that the hereditary transmission of disease is a crime against the best interests of the race and must be punished. Such a public opinion would confer material benefit not only upon the present generation, but also upon those who are yet to come. —*The London Practitioner.*

DIETETICS IN TREATMENT OF DIGESTIVE DISTURBANCES.

Bicket discusses what is meant by a light digestible diet. Does this mean foods easily attacked by the ferments, or easily passed along out of the stomach, or not inducing much secretion of digestive juices, or does it mean easily absorbed? The individual conditions in each case require that the diet should conform to the special manifestation of incompetency, and much more research is needed in this line. The effec on the motor and secretory functions depends on the physical structure and chemical composition of the food. The more finely divided the food the less the demands on the motor organs, and also the less the stimulus for secretion. Low temperatures seem to stimulate motor functioning; the more concentrated the solution the greater the stimulus to secretion. The chemical composition of the food is also important from this point of view; human milk leaves the stomach quicker than cow's milk, even in the same dilution. He lists as articles that have little, if any, effect in stimulating gastric secretion: water, alkaline mineral waters, tea, cocoa, cream, egg albumin, other pure native albumnoids in aqueous solutions; also 0.9 per cent. salt solution. Of solid foods he mentions boiled meat, fats of all kinds, boiled vegetables, starch and sugar; the vegetables should be taken in the form of a puree, that is, mashed soft.—*Medizinische Klinik.*

PROLONGED CACHETIC FORM OF CEREBRO-SPINAL MENINGITIS.

Debre describes a prolonged, cachetic form of cerebrospinal meningitis in which, after the first febrile attack has imporeved, there is a period of lessened symptoms, followed by a fresh attack of fever and severe symptoms, which is again followed by a remission of symptoms. The child gets into a condition of cachexia, with stiffened neck, in which he lies half stupid when not touched, but complains bitterly of pain when touched, his cries being heartrending. The body is much emaciated, the limbs stiffened in flexion, and the neck stiff. There are paresis of all the limbs, incontinence of urine, and bedsores. Reflexes are di-

minished or absent. After a time this condition may improve gradually and the patient recover without paralysis, but often with deafness or blindness. Autopsy shows thickening of the membranes, dilatation of the ventricles, which are filled with pus, and softening of the cortex. In these cases puncture of the spinal cord does not have the usual effects, the serum not being able to reach the brain or the major portion of the cord on account of the false membranes which have formed around the cord, which do not allow the serum to flow upward.—*La Presse Medicale.*

DERMATITIS FROM BALSAM OF PERU.

A case of extensive skin trouble resulting from the use of Peruvian balsam for the cure of scabies has been reported by Hazen in the Journal of the American Medical Society. When the patient had applied an ointment of the balsam freely to the hands and arms, the whole body broke out into an ill-defined macular eruption. The use of a mild lotion and discontinuance of the ointment led to the speedy disappearance of the rash. The majority of cases derive nothing but benefit from the balsam of peru treatment of itch, but in addition to the macular eruption mentioned above some patients have developed urticaria; others have attributed bronchitis to the drug; and nephritis has developed in a few instances.—*Hospital.*

ETIOLOGY OF PELLAGRA.

Sambon (*The Journal of Tropical Medicine and Hygiene*) says in regard to the Protozoal Theory that in 1905 Sambon suggested that pellagra is a parasitic disease and in this article reiterates this suggestion and further elaborates it by suggesting that the disease is not only of parasitic origis but is insect borne and conveyed by the simulium-sand fly. His theory is based on the following facts:

1. The disease is parasitic for the reasons that: a. The cutaneous and other symptoms usually recur periodically each summer for many years even though the patient remove from an endemic area and subsist on a corn free diet. b. Its peculiarities in distribution, seasonal incidence, symptoms, chronicty and pathology correspond to those of other protozoal diseases—trypanosomiasis, kala-azar, sphilis.

2. The disease is insect borne because: it is not directly contagious, infection through food or water does not explain its epidemiology, it is limited to rural districts being practically restricted to the field laborer.

3. The disease is conveyed by simulium because: the topographical distribution of the simulium and pellagra appear to be coincident, the adult stage of the simulium apparently presents a seasonal incidence similar to that of pellagra, the insect is found in rural districts only but seldom entering towns or houses, the only class of people constantly exposed to the bite of the simulium are field laborers, the disease is practically confined to the field laborer, other similarly small blood-sucking flies are strongly suspected of being conveyors of disease—phelebotomus papatassi, dilophus febrilis.

NUTRITIVE SUPOSITORIES.

Rectal feeding is very unsatisfactory and cannot supply sufficient nourishment to keep a patient alive, yet will often tide him over such acute conditions as hemorrhage of the stomach, when absolute rest of the stomach is necessary. The chief objections to nutrient enemata are their low caloric value, the inconvenience of administering them, and the necessity of first washing out the intestines. Even with all precautions, they are often not retained, because of their being too bulky. Frequently they will also lead to the formation of an excessive amount of gas, and thus cause considerable colic and tenesmus. It would be almost impossible to give such patients any nourishment at all, were it not for the fact that I. Boas has found that a sufficient amount of dextrine, crystallized egg-albumin, salt and cocoa butter can be given in the form of suppositories. These suppositories are indicated where there is excessive irritability of the rectum, in carcinoma, volvulus, intusception, etc. The lack of water may be supplied by saline injections into the rectum, or under the skin. Absorption usually requires from three to four hours.—*Berl. klin. Woch.*

PULMONARY EMPHYSEMA AND THE OPERATIVE METHOD OF EREUND.

Borgherini relates the operative history of an old case of emphysema in a woman of sixty years of age, in whom the thorax was practically fixed, dyspnea severe, and bronchial attacks periodic, especially in the spring. In June, 1908, the thorax was rigid, dilated, and conspicuously barrel-shaped. There was slowing of the circulation in the small and large vessels. Stiasni executed the Freund operation, resecting the cartilages of the second, third, fourth, and fifth

ribs on the left side, which were altered, enlarged, rigid, arched at the extremity so as to form an angle, and contorted in their longitudinal axes. The operation was well tolerated; the intensity of dyspnea diminished at once; on the fifteenth day the patient left the hospital in good general condition, with circulation and respiration improved. She continued to improve, took up her usual peasant's work, and to-day, two years from the operation, is entirely cured. She has normal circulation, and respiration, and is in good general condition, and able to work. A radiograph showed the operative result. The spirometer, cytometer, and sethograph, taken at various times during the two years, showed a progressive improvement in the respiratory process.—*La Riforma Medica.*

INFLUENCE OF THE SPLEEN UPON GASTRIC DIGESTION.

Gross found that following extirpation of the spleen the secreiton of pepsin disappears almost completely and then slowly attains its normal height. At the same time there is a lymphocytosis which, parallel with the increasing pepsin-content, falls to the normal level.—*Zeitschrift fur experimentelle Pathologie und Therapie.*

ECZEMA, INFANTILE, TREATMENT OF.

In addition to dietetic and other measures calculated to reduce toxin formation and improve elimination, and local applications, which he only uses when the infant is strong and healthy, the author refers to the value of thyroid treatment in some of these cases. In the patients benefitted there was generally a history of digestive intoxication or of some cachexia. Under the thyrod treatment there is usaully an acute exacerbation, which gradually subsides. At the end of two weeks the skin condition is improved, and about a week later the eczema is cured or greatly attenuated. In a few instances the disease seemed to be aggravated by the thyroid. The drug should be reserved for sluggish cases, when the eczema has resisited ordinary measures, including the dietetic and hygiencic. The author administers the thyroid in substance. No untoward effects were ever noted with it, though it was used in a large number of cases and in some of them over long periods. The thyroid treatment was found useful in fat babies with an inherited rheumatic taint, in whom the "arthritic diathesis" is likely to be accompanied by thyroid insufficiency.—*Rocaz Annales de Medecine et Chirurgie Infantiles.*

CASE OF EXTRA-UTERINE PREGNANCY DISCHARGING THROUGH THE RECTUM

The case reported by Ph. Bockheimer is perhaps of more interest as a curiosity of medicine than in any other regard. A woman of 32 years, in poor physical condition, complained of having in the course of a few days passed several small bones by the rectum. Digital examination revealing the presence of a splinter of bone above the sphincter, the latter was slowly dilated, and a diverticulum in the anterior wall of the rectum was found to lead to a collection of bones in a position corresponding to that of the cul-de-sac of Douglas. Repeated irrigation with hot salt solution resulted in complete emptying of the cavity. Besides the bones nothing was found but necrotic fragments and blood clots. Iodoform drainage and packing led to a smooth recovery, and in a short time the patient gained 20 pounds in weight. Examination of the bones showed them to represent the almost complete skeleton of a 7-month fetus. The patient admitted having suffered five years previously with violent pains in the abdomen; at which itme the doctor and midwife had disputed as to the existence of pregnancy or of thickening (!) of the womb. —*Berl. Klin. Woch.*

OPTIC NEURITIS AS RECRUDESCENCE AFTER 606.

Kowalewski reports this case. The patient, having received an injection of 606 for general syphilis, was discharged as cured. Two months after the injection he complained of severe headaches, especially at night; and after ten days of often intolerable sufferings, he was further affected by a clouding vision and limitation of the visual field. The fundus showed a typical optic neuritis. The preceding headaches pointed to a meningitis which had latterly traveled along the optic nerve to the disk. Mercurial inunctions in ten days raised the vision of R from 1-3 to 1, and of L from counting figures at 3 m. to 1-2. Ten days later vision was 1 in both R and L. The fact that recovery after the mercury was more rapid than would have probably been the case in a patient who had not received 606, suggests to the writer the advisability of using the two drugs in association rather than entirely discarding mercury in favor of Ehrlich's preparation.—*Berl. Klin. Woch.*

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TREATMENT OF WHOOPING COUGH.

Berliner, writing in the *Munch med. Woch.*, has introduced another method for the treatment of whooping-cough. He thinks that practically all of the long list of drugs usually employed are unsatisfactory, with the exception of quinin, used by him in a special manner. Finding that insufflation of quinin frequently produced paroxysms of coughing, he has for the past two years employed in all cases an ointment containing from 15 to 40 grains of quinin in from 2 1-2 to 4 drams of lard, according to the age of the child. Three or four times a day a pellet of the ointment, about the size of a pea, is introduced into each nostril by means of a small glass rod. The child is placed on its back so that the ointment may penetrate to the deeper parts of the nasal cavity. In one case the improvement was immediate, but, as a rule, considerable benefit was secured at the end of three or four days. Not only do the paroxysms diminish in number, but they decrease in severity, the fit of coughing subsiding into an ordinary cough as it gets less frequent. Some relapses occur, but they yield to renewed treatment. The treatment is much more effective the younger the child. The general convulsions consequent on the paroxysms in children under two years of age cease, as a rule, as soon as this treatment is begun. The method has the additional advantage that it is easy of application. —*The London Practitioner.*

RUPTURE OF NECK VESSELS INTO PHARYNX IN SCARLET FEVER.

Griffith and Riddle (*Glasgow Medical Journal*) record 2 cases of this rare complication. (1) Boy, aged nine and one-half years, developed cervical adenitis on the twenty-third day of a mild attack of scarlet fever. Three days later the right tonsil became swollen, and on the twenty-eighth day presented the appearance of a quinsy. Pressure with the finger-tip caused the swelling to break down and this was followed by profuse and uncontrollable hemorrhage. Death took place in about a minute. The autopsy showed an irregular cavity behind the right tonsil lined with laminated blood-clot. The outer wall of the cavity was connected with the internal jugular vein. (2) Boy, aged three and one-half years. Death from arterial hemorrhage occurred without warning on the twenty-second day of disease in convalescence from scarlatina anginosa. The autopsy showed two large breaking-down glands in the neck and involvement of the internal carotid in the ulceration.—*British Journal of Children's Diseases.*

OBSERVATIONS CONCERNING THE ACTION OF DIGITALIS.

Leyden (*Therapie der Gegenwarl*) doesn't believe it is the best to prescribe digitalis as soon as symptoms of cardiac incompetence occur. The Doctor says that tolerance soon follows the use of digitalis, and when more serious symptoms of cardiac failure develop no results are obtained from its administration. Measures tending to secure both physical and mental rest for the patient should be employed before the use of digitalis. Von Leyden is of the opinion that digitalis has a greater action upon the left side of the heart, and so may fail to benefit those patients suffering more from a failure of the right heart. In fact, he believes that digitalis may even be harmful in these cases. The writer also says that, due to the action of digitalis principally upon the cardiac muscle, there will be little or no effect in advanced myocarditis or when valvular disease is associated with myocarditis. Von Leyden has not seen much benefit derived from the use of digitalis in fever; in fact, large doses seems to be actually harmful. The author prefers the infusion of digitalis, and gives it in smaller doses than those usually prescribed, and discontinues it when its therapeutic effects have been obtained. He believes that digitalis in pill form is untrustworthy and that the tincture is uncertain. Digitalis leaves vary in strength according to where grown and the time of gathering. Age also diminishes their strength.

THE SENSIBILITY OF THE FEMALE PELVIC ORGANS.

Brose (*Zent. f. Gyn.*) has been able to note the sensibility of the internal pelvic organs. The anterior vaginal wall and the vaginal portion of the cervix were infiltrated in the usual way with a novocain-adrenalin solution. The vaginal wall was split and the bladder dissected off the front of the cervix without pain. A further infiltration was made in the cellular tissue below the utero-vesical reflexion of peritoneum, and the peritoneal cavity opened painlessly. When two fingers were introduced through this opening into the peritoneal cavity the patient complained of a feeling of nausea. The pulling forward of

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the uterus into the incision and out into the vagina produced pain described as down-bearing in character and like that of labour. But after the uterus, tubes, and ovaries were in the vagina they could be handled freely without causing the patient any discomfort whatever. The application of hot and cold instruments and of firm pressure produced no response. The tubes were excised out of the angle of the uterus, and the divided mesosalpinx and uterine angle stitched quite painlessly. There was again some pain on pushing the uterus back, but none during the stitching of it to the anterior vaginal wall. These observations confirm for the pelvic organs what has already been established regarding the abdominal organs, namely, that they are, at any rate in their normal state, insensitive to ordinary stimuli.

SYPHILIS, OPTIC NEURITIS AFTER USING "606" IN.

The author reports a case in which, after an injection of this remedy had caused a severe syphilitic process promptly to yield, a relapse took place in the form of severe headache, which lasted several days and was followed by optic neuritis. He believes the relapse occurred as a meningitis which extended along the sheath of the optic nerve, finally causing a typical neuritis. The patient was then given mercurial inunctions, under which prompt recovery took place. The author presents this case as an example of optic neuritis occurring as a mere coincidence with the use of "606." He believes that the few cases of optic neuritis reported as having been due to the remedy do not bear sufficient weight to bring the remedey into discredit.—*Kowalewsky, Berliner klinische Wochenschrift.*

THE DISTRIBUTION OF APPENDICITIS, WITH SOME OBSERVATIONS ON ITS REACTION TO DIET.

Williams (*British Medical Journal*) has collected a large series of statistics from various ssources, and offers the following conclusions:

It would be unwise to draw any broad deductions from the above incomplete statistics, except that appendicitis has a markedly different incidence in various countries, and that this different incidence may be very largely a question of diet.

Many theses have been advanced to explain this relationship to diet. The above satistics, if they show anything, show that where there is a large meat cating population there appendicitis is a common disease, whereas in those countries where little meat is eaten appendicitis is rare if not almost unknown.

There is no doubt, according to most people that apart from improved diagnosis appendicitis has greatly increased in the British Isles in the last few decades. Very little evidence has so far been advanced to any explanation of this. The greatest change in the diet of the people has undoubtedly been the marked increase in meat eating. With the amount of foreign meat and canned food the poorer classes even are now able to supply themselves in fair quantity with meat of varying kinds, more particularly mutton.

The fat of meat, more particularly of mutton and beef, is characterized by the small amount of unsaturated fatty acid they contain. That the fat in the food determines the nature of the fat in the tissues is well known. From the clinical and chemical work quoted above it would seem that this factor determines the nature of the soaps to be found in the wall of the intestinal tract (probably as a manifestation of their excretion), and where these soaps are the calcium soaps of saturated fatty acids there is usually some evidence of disease, either a mucous colitis or an intestinal lithiasis. In appendicits, with which these two conditions are clinically associated, there is the same occurrence of these calcium soaps in the wall or in the lumen.

In my opinion, therefore, there is some evidence to connect the nature of the fat in the food with the incidence of the disease.

Further observations are being made on the lines indicated at the beginning of this paper, and investigations are being carried out as to the nature of the fats in the food, the tissues, and, more particularly, in the intestinal tract. Experiments which have been recorded show that the fats in the tissues are not neutral fats but complex phosphatides, the fatty acid radicles of which are largely unsaturated, and evidence is being obtained which would tend to show that these unsaturated fatty acid radicles are those which are used for the immediate use of the body, and it is possible that the cilcium soaps above mentioned are evidences of some excreting process of the intestinal tract for the purpose of eliminating either the calcium or saturated fatty acid radicle.

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Origin and Prevention of Puerpeal Fever.—Doderlein (Munch. med. Woch.) States there are two sources of puerperal infection; the bacteria contained in the vagina of the patient herself, and those that are brought to her from without, by her physician and attendants. The bacteria that live in saprophytic form in the vagina by their interaction are a protection against bacteria from without, through their production of lactic acid. If we find in a puerperal woman that the normal bacterial condition of the Vagina is altered, then we must exercise care to prevent fever. It has been the custom to disinfect the vagina before labor by means of a vaginal antiseptic injection. By this means we remove the natural bacteriological protection in the vagina, and at the same time make the mucosa so dry that it is much more likely to be injured during childbirth. The author, with the assistance of the physicians in charge, made investigations in the

hospitals for women in Tubingen and Munich, of the results of douches and of absence of douches before labor. In one hospital 1-1000 corrosive sublimate was used in 500 woman, in the other 1-½ per cent. lactic acid was used in an other 500 women, and in each case a comparison of the results was made with another 500 women who received no douches. On comparing the percentage of fever cases with and without douches it was found that there were more cases of fever when douches were given than when they were not. This shows that disinfection of the vagina is harmful rather than beneficial. As to the other source of infection, the hands of the examiners, it has been found that there is no way of positively removing all bacteria from the skin, especially when the hands made harsh by work; but if we use very thin rubber gloves carefully disinfected with live steam, we shall be just as well able to feel the vagina and cervix and we shall be incapable of bringing bacteria from without. Therefore, it is the opinion of the author that rubber gloves should be used in all cases of labor, thus avoiding the complications that do not occur when delivery is attempted without vaginal examination.

X Ray Treatment for Graves's Disease.—Schwarz (Arch. d'elec med.) says that radiotherapeutic treatment of Graves's disease has as high a percentage of success as the surgical method, and has none of the danger and pain incident to the latter. The doctor insists, moreover, that X-rays in exophthalmic goitre have a distinct etiological basis, one of their general properties being their power to diminish glandular secretions. Soon after the irridiation of the thyroid a modification of the nervous symytoms is generally observed, and this is frequently followed by a sudden change in the general nutrition. In some cases the patient puts on weight very rapidly; a gain of 6 or 8 kilograms (13 or 17 lb.) in a month is quite common. Within a short time there is often also a diminution of the exophthalmos, although this is a most persistent symptom, especially in cases of long standing. Out of 40 cases under the author's observation, after riado-therapeutic treatment had been applied for a mean period of three months, there was increase of weight in 26; diminution of the pulse-rate in 36; amelioration of the nervous symptoms in every case; of the exophthalmos in 15; of the goitre in 8. The improvement is constant for the nervous symptoms, and almost constant for the tachycardia, and on this latter point Kraus is quoted as saying that when the tachycardia has disappeared for a certain time, one may consider Graves's disease as cured, althought other symptoms may continue. On these grounds the author claims 90 per cent of successes for radio-therapy, which is at least equal to the percentage of operative successes. As technique, he points out that the skin of the cervical region is normally more sensitive than that of other regions of the body and that this sensibility is further increased in sufferers from Graves's disease, Therefore too strong doses must not be given. Irradiates the neck, first in the anterior directions, then in the left and right lateral directions with rays filtered throught piece of glass of 2 mm, thickness. The dose is ½ Sabouraud, or 2 kaloms of the Schwarz Fallungs-radiometer, applied aa intervals of three weeks; that is to say, first week, neck, anterior direction, ½ Sabouraud; the following week, right lateral direction. ½ Sabouraud; a week later, left lateral direction, ½ Sabouraud; and recommencing eight days later with the same dose in the anterior direction. This cycle of irradiations must be followed uninterruptedly, frequently for six months.

Recurrent Nerve Paralysis, in Goitre Operations.

Dumont (Dtsch. Zeitschrift fur Chirugie) says that a division of the inferior laryngeal nerve is of rare occurrence, it may happen that this nerve is grasped and cut between two ligatures, in a case of abnormal location of the inferior thyroid artery. The nerve may also be ruptured or tied. The accident is relatively favorable when there is merely a contusion or overstretching of the nerve. In the opinion of the author, the secondary paralyses are often present prior to the operation, but have been overlooked; or they may be the consequence of imperfect asepsis, or of a hematoma. They are numerous transition stages between total paralysis and mild paresis. Bilateral paralysis is fortunately of exceptional occurrence.

All the surgical methods are imperfect, as far as the care of the nerve is concerned, the operator being confronted with the nerve first at the crossing with the inferior thyroid artery, and next in the last portion of the nerve before its entrance under the cricopharyngeal muscle. Branches of the recurrent nerve may pass along thn superior thyroid artery, towards the communicating artery, and be encountered at the posterior aspect of the gland. Numerous suggestions have been offered for the safeguarding of the nerve. In the procedure of Roux who advocates enucleation as the best method, the inferior thyroid artery is ligated

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with a catgut thread, without tightening the ligature, which is performed centrally, so as not to damage the nerve. This mode of hemotasis does away with the necessity of applying other ligatures and clamps, which are apt to damage the nerve and its branches. The results of this method were favorable. Among 1148 strumectomies, there were only 16 cases of operative lesion of the recurrent nerve. In nine of these cases, the nerve was injured in its continuity, whereas the remaining seven cases concerned mild tractions or contusions, which were merely transitory in regard to the vocal disturbances. While the prognosis of simple lesions of the nerve is favorble, the voice will never regain its normal character in a case where the recurrent nerve has been injured in its continuity. In regard to the treatment, suture has been performed with a favorable outcome, by Stierlin. In the later stages, electro-therapeutics and injectics of strychnia, are claimed to prove beneficial.

Case of Missed Labor with Central Placenta Previa.

Windeyer (Australasian Medical Gazette,) reports a case L. H.. age 28, married, four children, youngest two years and three months; one miscarriage a year ago. Admitted to the Royal Hospital September 22, 1908 with the following diagnosis: Tumor obstructing os and likely to cause serious trouble at delivery; transverse presentation. History.—Last menstrual period December 17, 1907, when she had a "flooding." On January I7, 1908 she had a slight brownish discharge which lasted about a week. She quickened early in may 1908, when her medical attendant said she was five months pregnant. Fetal movements felt strongly until a week before admission to the hospital. Abdomen increased in size from May until two weeks before admission. Menstruation, normal. Previous history.—Growth removed from cervix ten years ago; curetted a year ago after a miscarriage. Examination.—Patient is a healthy looking woman. Abdomen is uniformly enlarged and about the size of an eight months' pregnancy. Palpation shows the uterus enlarged and reaching midway between umbilicus and ensiform cartilage. No fetal parts can be felt owing to the marked tone of the uterine walls. No fetat heart sounds heard. Breasts contain milk. Vagina normal. Cervix is nearer the symphysis than usual. Projecting down into the cervix to within half an inch of the external os, which admits a finger, is a smooth rounded hard mass about the size of the larger end of a hen's egg. This mass has the consistency of a fibroid polypus and is apparently continuous with a hard mass, which extends all around the ceruix. No fetal parts can be felt p. v. or bimanually; no ballotment obtained. The diagnosis of fibroid of the upper part of the curvix was made, position and presentation of fetus could not be diagnosed, and it was decided to leave patient alone, to let child macerate, as it had apparently been dead about a week. It was thought that by this means it would be easier to deliver past the tumor obstructing the cervix, and to interfere if natural efforts were unavailing. She remained under observation about a month; general condition good. On the 28th day of November, 1908, he intended to induce labor by the introduction of bougies, but found that the cervix was closed up by the mass, and that there was no passage into the uterus. This set the Dr. to thinking, and the only way he could account for it was that the supposed fibroid had become adherent all around; the idea of a placenta previa never crossed his mind. On December 3, 1908, under chloroform p. v. condition unchanged ; sound passed through cervix causing a good deal of hemorrhage; aspirating needle passed into tumor and no fluid obtained. Vagina packed with gauze. Provisional diagnosis of fibroid was made. Abdominal section performed the uterus was delivered through the incision. Uterine wall was incised vertically and a large full-time fetus delivered along with placenta and membranes. The placenta was attached more to the right side than to the left and completely covered the os with a raised portion jutting down into the cervix. The uterus make no attempt to contract after the removal of the fetus, and as the child had been dead some time it was thought best to remove the uterus, and a suprevaginal amputation was performed. The patient made an uninterrupted convalescence. The main points of interest are (1) Missed labor, which is a very rare condition; (2) central placenta previa without symptoms; (3) the projection of a lymph of the fibrous placenta into the cervical canal simulating a fibroid and causing the error in diagnosis.

The Permanent Slow Pulse.

Rostaigne (Medical Press and Circular,) was the first to describe the pathological permanent slow pulse and the question had come to the front again recently. As a rule the pulse rate in these cases is from thirty to forty pulsations a minute, but it is sometimes even slower than this. In a general way examination of the heart does not reveal anything abnormal in respect of the orifices, but Stokes. who, together with Adams, described the pathological condition known as Stokes-Adams' disease called

"theories are flexible speculations, facts are rigid realities.

In dealing with an inflammation, whatever may be the etiological theory, the fact remains that you have a condition manifested by swelling and pain from infiltrated tissues, redness from arterial interference, and other cardinal symptoms indicating the application of hot moist heat, which relaxes tension and normalizes circulatory disturbances.

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Whether the inflammation be superficial, such as hand infections, boils, carbuncles, etc., or of the deeper structure as in bronchitis, tonsillitis, quinsy, pleuritis or peritoneal involvements, antiphlogistine applied thick and hot affords relief promptly."

attention to a peculiarity of the heart that is sometimes met with. Between the audible heart contractions a dull, muffled sound is heard, which he regarded as an abortive systole represented only by auricular contraction. It follows that the heart sometimes splits up the systole into two parts, a superior auricular and an inferior ventricular, which occasionally misses fire. The author shows that Stokes' observations are borne out by the present conception of the pathogenesis of permanent slow pulse is an affection that runs a long course. As a rule it lasts for several years, but the prognosis is always grave indeed fatal. Since Charcot's time and up to a recent date, the Stokes-Adams' syndrone has been regarded as a consequence of disturbance of the circulation in the medulla, that is to say, the central nervous system was credited with a preponderating role in regulating the heart beat. In diew, however, of recent physiological and anatomical researches, the myogenic theory has taken the place of the neurogenic, the conception of cardiac automatism is now generally admitted, and little or no importance is attached to the medulla as the seat of origin of the disturbance of cardiac rhythm. The symptoms observed in the course of permanent slow pulse are now referred to a lesion of His's bundle, and what is more important is the fact that syphilitic lesions have been found at the root of the mischief. As the author remarks, this is quite a novel conception and justifies our anticipating recovery, in many of these cases of permanent slow pulse as a result of mercurial treatment.

Chronic Obstetrical Inversion of the Uterus Treated by Posterior Colpohysterectomy.

Blanc and Wies give the histories of two cases of chronic inversion of the uterus which were treated by posterior colpohysterectomy with recovery in one and death from infection in the other. This complication may result from the presence of tumors at the fundus or improper manipulations undertaken during delivery. When the placenta is under removal traction on the cord or pressure on the fundus combined with inertia uteri may result in the inversion. When acute it may cause death at once with great pain and from severe hemorrhage. It may be accompanied by less marked symptoms and may become gradually complete and remain so, becoming chronic. The result is an infection which will rapidly cause death if reduction is not effected. Spontaneous reduction is rare. In general it is necessary to reduce it by manual means, or by tamponing with iodoform gauze after partial reduction, or to remove it before infection has become general. The best operation for its cure is colpohysterectomy unless the woman is young. In the latter case hysterectomy by the extravaginal method of Pinard is to be preferred.—Gazette de Gynecologie.

Barlow's Disease.

Marfan (Ann. de med. et chir. inf.) says that Barlow's disease shows itself in general about the age of ten months; it is characterized by anemia, pains in the bones, subperiosteal hemorrhages, especially in the lower limbs, and ecchymoses of the gums when the child has teeth. It often is coexistent with rickets. It is rapidly cured by a change to antiscorbutic diet. There are changes in the bones of the limbs and skull. Of the latter the most serious are the changes in the orbit, causing exophthalmus and thickening of the upper lid with ecchymosis. The sternum and cartilages of the ribs are depressed, due to fractures of the anterior extremities of the ribs. The alterations are generally symmetrical, but may differ in degree on the two sides; the symmetrical lesions do not appear on the two sides at the same time, but succeed one another at a short interval; the intensity of the anemia is in relation with the number and size of the hematomas. There are a hematuric form, a latent form and anomalies of position of the hematomata. The duration is from three to six months. In some cases the hematomata suppurate from secondary infection. The osseous lesions consist of subperiosteal hemorrhages, fibrous transformation of the red marrow, and resorption of the chondrocalcareous layer. The special location of the hematomata is the lower part of the femoral diaphysis. The periosteum is separated all around the bone and appears like a very vascular membrane. Between the periosteum and the bone is a large blood clot. The periosteum is encrusted with bony deposits, an indication of the preservation of the osteogenetic funciion. These deposits account for the extreme hardness of the hematoma. Osseous rarefaction is a constant lesion; it occurs even in bones that are not involved in hematomata, and results in multiple fractures of the bones. The microscope shows microscope shows that the cause of this condition is the disappearance of the osteoblasts in the forming bone trabeculæ udder the periosteum. The most generally accepted theory of Barlow's disease is that it is a form of infantile scurvy. It resembles adult scurvy in that both are caused by the absence from the diet of necessary natural products. It generelly occurs in bottle-fed babies who have been fed on farinaceous foods, sterilized milk, or boiled milk. It

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An Unusual Complication of Labor.—Munro reports a case in the Indian Medical Gazette, in which a cystic tumor about twice the size of a fetal head was attached between the legs of the fetus. The base of of attachment corresponded to what should have been the perineum and to the coccyx and sacrum. The tumor was covered by ordinary skin continuous with that over the abdomen and buttocks of the fetus. No opening could be discovered in the fetus. Its pelvic cavity communicated directly with the cavity of the tumor. In front of the base of attachment of the tumor was a rudimentary vulva with a small blind urethra. There were several daughter-cysts in the walls internally and running around the internal walls were loops of the intestine Of these loops some were rudimentary and blind. They were attached to the inner wall of the cysi by mesentery. The rectum of the fetus was in this way continuous with a blind loop in the wall. The spinal column of the fetus did end at the coccyx but was continued on into a bony mass which seemed like a rudimentary pelvis. From this mass five stunted twisted legs had projected forming a star-shaped figure. Of these one foot had eight toes, one six toes, one three toes and one one toe. They were not all of the same size and were at different stages of development and perfection. Two of them were very rudimentary, containing some rudimentary bone. But joined on to the central mass by skin and fibrous tissue. Another was only joined on by skin and fibrous tissue. Two of the legs had articulations with the rudimentary pelvis' and did not hang loose like the other. The doctor dissected out from one a fairly well-formed tibia with ossified shaft and upper and lower cartilaginous epiphyses

Treatment of Congenital Syphilis with "606"—McDonagh (Brit. Jour. Child. Dis.) has found that a bigger dose is required to heal an early chancre than to completely curae case of extensive gummatous ulceration, for instance, in a congenital srphilitic; therefore one is justified in assuming that the cure is largely due to the amount

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of antitoxin formed, and those cases which have severe syphilitic lesions, such as extensive ulceration of the pharynx and larynx and meningitis are very ill for a few days after the injection, have high fever, and sweat profusely. It is four of the twelve cases the tuberculides were the only evidence of tuberculosis present, but in all these the von Pirquet reaction was positive in children between three weeks and two and a half years of age.

Congenital Hematocolpos, Hematometra and Hematosalpinx.—Lewers in (The London Practitioner,) says that in most cases of retained menses the fluid is contained in the distended vagina alone, and the uterus is not dilated. The condition is one which may be conveniently termed simple hematocolpos. In such a case it is merely necessary to divide the obstructing septum and allow the retained fluid to escape. There is in such cases no risk in hastening the escape of the fluid by pressure on the abdomen, or by using a vaginal douche. There is no special liability to sepsis in cases of retained menses more than in any other operation case. The supposed inherent liability to sepsis in certain cases of retained menses is to be explained by the presence of hematosalpinx in addition to hematometra and hematocolpos. The dilated tubes become infected once the vaginal septum has been divided. If hematometra exist as well as hematocolpos, a condition which is easily recognisable after opening the vaginal septum by finding that the finger passes the internal os into the uterine cavity, the probability that the Fallopian tubes are dilated is so great that the safest course is to perform an exploratory laparotomy. The tubes, if found dilated, can then be removed. If it is likely to be impossible to keep the vagina patent, the uterus should be removed also.

Hydramnios.—Burstal in (Londou Practitioner,) analyzes 133 cases of hydramnios of which six were twin pregnancies, seventy-four male and only sixty-one female. Monsters and deformities were rare. Two were anencephalic, one was hydrocephalic with double hare-lip, spina bifida, and talipes, and one had hare-lip and cleft palate, i. e. four deformities out of 139 children born. The effect of the excess of liquor on the second stage of labor was not marked, the average duration being about one and one-half hours. The excess of liquor amnii seemed to predispose to postpartum hemorrhage, it being recorded in nineteen cases. The presentation was vertex in 122 cases, breech in thirteen cases, face in two, and transverse in one. The excess of fluid does not seem to predispose to abnormal presentations. The age of the mother cannot be considered a predisposing cause for hydramnios, the ages vary from eighteen to forty-six, nor can the number of the pregnancy as hydramnios occurred in pregnancies varying from the first to the fifteenth. In no single case was there a previous history of hydramnios. Albumin was present in the urine of the mother in 46 out of 112 recorded cases.

Anti-infectious Power of Blood of Infants,—Tunnicliff (Jour. Infect. Dis.) shows that at birth the opsonic power of the blood serum toward streptococci, pneumococci and staphylococci is a little less than that of adult serum. It falls still lower during the first months of life and does not equal the opsonic power of adult serum until about the second year. The phagocytic activity of the leukocytes of infants toward streptococci, pneumococci, and staphylococci follows a course similar to that of the opsonic indices. The leukocytes at birth are a little less active than those of the adult. Their activity diminishes considerably during the first months of life and does not reach that of adult leukocytes until about the third year. The phagocytic power of the whole blood of infants drops decidedly during the first and second months of life and does not reach that of adult blood until about the third year. During the first and second years of life the anti-infectious power of the blood as measured by the opsonic power of the serum and the phagocytic power of the leukocytes is thus shown to be far below that of adult blood.

Winter Weather Suggestions.

The great prevalences of coughs, at pret sent, especially those of grippal origin, makes it not amiss to present a suggestion and a remedy. In place of remedies which always dry up expectoration, disturb digestion, cause constipation, and render the patient uncomfortable and drowsy, it is desirable to employ the extremely efficient and popular cough sedative, Antikamnia & Codeine Tablets. This remedy relieves cough by its soothing effect upon the air passages, but does not interfere with expectoration, and, in fact, renders it easier by stimulating the respiratory muscles. Only a very small dose, one tablet, every one, two or three hours, for adults, is required to produce a satisfactory result. One on the tongue when retiring will greatly relieve night coughs.

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"606" in the Treatment of Juvenile General Paralysis.

Abraham, in the London Lancet, reports a case of juvenile general paralysis, treated with an injection of 0.3 gramme of salvarsan, without improvement. At the outset Ehrlich cautioned against the use of "606" in degenerative changes. In syphilitic and parasyphilitic affections of the nervous system, hopes of success may be entertained in cerebral syphilis, and amelioration of symptoms in some tabetics and remission in general paralytics may follow the use of the drug. To anyone, however, acquainted with the frequent remission, and even sometimes complete cessation of ataxic and mental symptoms, for a time in tabetics and general paralytics without treatment, the evidence that such improvement is due to the use of "606" is not convincing, and the necessity of early and systematic treatment to prevent these late manifestations becomes increasingly urgent. In Wassermann's reaction we apparently have a means of discovering latent congenital syphilis in the children of known syphilitics, and these are the cases that seem particularly liable to develop juvenile general paralysis. Considering, then, the apparent hopelessness of checking the malady by even the latest form of treatment, and the known fact that mercury has been proved time and again to be equally useless, it is imperative that such children should be given the very best possible chance of the earliest possible opportunity; and the mere fact that treatment has a very dubious effect on the chsracter of the Wassermann reaction, instead of suggesting to us the impossibility of curing congenital syphilis, should stimulate us, on the contrary, to continue treatment, possibly for years, instead of, as is so frequently the case, stopping treatment as soon as the early manifestations during the first year of life subside.

Elastic Traction.

Wright in the (British Medical Journal) discusses the use of rubber as an orthopedic agent. He says, in cases of flexion of joints, when no actual ankylosis is present, but immediate straightening by force is undesirable, the author thinks no more valuable means of rectification exists than elastic tension. First, rubber has the advantage over steel springs in that its tension can be employed through a much wider range, and the strength of the tension is capable of more ready adjustment. It is much easier to apply slight degrees of traction or pressure, much easier to arrange for the exact line of traction required, and, in addition, any apparatus needed may be readily and cheaply improvised. The appliances are exceedingly cheap, easily managed, and easily replaced. A little ingenuity and some rubber cord is the stock-in-trade, though patience and care are, of course, also necessary, as living tissue cannot be dealt with quite as if it were a question of cabinet-making or upholstering. Pressure sores are a possible result of mismanagement or neglect, and are easier to make than repair.

For flexed joints that require straightening, all that is necessary in many cases is the application of a straight splint across the angle of flexion, secured to the limb above and below the joint, but not so tightly as to prevent the lower segment from slipping through the bandages as the limb straightens. These bandages may be of any material, but it is better to use flannel or some slightly elastic material for the distal segment of the limb. The joint is left bare at this stage. Next an elastic bandage is carried over the joint and round the splint so as to exert the desired pressure in the required direction. The angle of flexion should be measured before and at short intervals during the treatment. A daily re-

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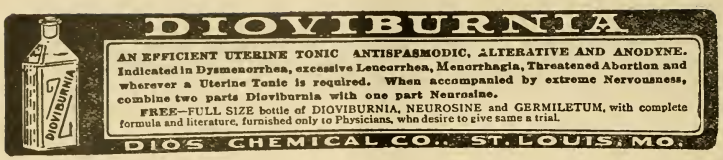
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moval of the elastic is necessary at first to make sure that there is no excessive pressure. Exactly similar appliances may be used to prevent or to correct cicatrical contractions in suitable cases. It is a good plan to substitute elastic traction applied to the lower segment of the limb, either as a temporary substitute or an alternative to the elastic pressure, if, for any reason, direct pressure over the joint is inadvisable. A good example of the use of elastic traction is seen in Bryant's double splint. In fracture of the patella, elastic traction may be used to approximate the fragments by steadying the lower one and drawing the upper downward toward it. In rachitic deformities the use of elastic pressure finds a very wide application. For curvatures of the shafts of the bones of the leg a straight splint applied on the conclave side with elastic pressure over the convexity of the curve will straighten a large proportion of these curved limbs. Of course, the more rapidly the deformity is increasing the more likely is the use of elastic pressure to succeed.

For the anterior curve of the tibia the tension of the calf muscles makes the use of elastic pressure more tedious, and in some instances nothing but cuneiform osteotomy or a splice section will succeed. For genu valgum in slight cases an outside splint applied on similar lines is efficient, but in severe cases there is great difficulty in maintaining steady pressure by reason of the tendency of the limb to rotate outward, and so take off the tension. In the great group of deformities classed as flat-foot and talipes, there is ample scope for the use of elastic traction. For paralytic conditions the elactic traction is a most useful adjustment to, or, in some circumstances, substitute for tendon grafting.

Thrombotic Softening of the Spinal Cord.

Bastian (London Lancet) believes that the evidence seems to be altogether overwhelming that in the great majority of cases of so-called acute myelitis," and also of "acute poliomyelitis," the affection is caused not by an inflammation, but by the thrombosis of some of the vessels of the spinal cord (when, in the latter disease, it is not due to a special acute degenerative process.) This latter conclusion, he believes, is rendered obvious: (1) by the similarity of the morbid changes in question to those occurring in the brain which are due to thrombosis, as well as to the absence of any reason why a primary imflammation should be rare in the brain and common in the spinal cord; (2) these strictly logical reasons are strongly reinforced by the fact of the existence of special conditions favoring the occurrence of thrombosis in the vessels of the spinal cord, and in just such parts of the cord as are most frequently affected; (3) by the fact that the disease is mostly commonly met in just such persons and under just such conditions (as to heart's action, blood-vessels and quality of blood) as are known to be favorable to the accurrence of thrombosis; (4) by the fact that the mode of onset the early symptomatology of the affection are wholly different from what they would be, had an inflammation of the cord actually existed; and (5) by the fact of the absence of any reasonable cause of inflammation, certainly in the majority of those in whom the malady makes its appearance.

Rhythmic Compression of the Heart for Apparenly Moribund Children.

Japha (Deutsche Medizinische Wochenschrift) reports two cases in which apparently moribund infants were treated by rhythmic compression of the heart and revived. The yielding thorax of a child renders this external manipulation more efficient than with the rigid chest of the adult. He does not ascribe the effect to the mechanical influencing of the circulation, but to reflex action. In the first case described a twelve-day infant with signs of heatstroke, unconscious, deeply cyanotic with foam at the month, the pulse scarcely perceptible, respiration 80 to the minute, improved rapidly under the rythmic compression of the heart and soon recovered after injection of camphor, and cold douches in a warm bath. The other child was a month old and apparently moribund, cyanotic, the temperature 43.3 C. (110 F.), the heart-rate 180, the breathing reduced to gasps at long intervals. Under the com-

pression of the heart and a bath with a cold douche, the temperature dropped to normal and all symptoms soon subsided. Both children are now nearly 2 years old and apparently normal in every respect. The thumb of the right hand is placed between the sternum and the appex and the chest-wall is pressed in rhythmically and deep, about 120 times a minute (120 rhythmische Herzstosse). The author thinks that this measure might prove effectual in pneumonia, in spasms of the glottis and in chloroform syncope. Under the rhythmic compression the pupils contract, the face grows less livid and a normal inspiration follows. He has been applying it for years for spasm of the glottis and has had no further fatalities from this cause, and he commends this measure in all such catastrophes and in those with anesthetics. What good does it do, he asks, to exhibit ether or chloroform when in consequence of the spasmodic closure of the glottis the patient is unable to breathe? The rhythmic compression of the heart is more effectual in many cases than artificial respiration. (In this connection we quote a recent case of successful massage of the heart in an apparently fatal early chloroform accident. The patient was a robust man and the operator, J. W. Milne, at once cut into the abdomen to the left of the xyphoid cartilage, and wormed his thumb down to the peritoneum and up through the diaphragm margin till he had it well behind the heart and the other fingers over the heart outside. He says in his communication to the British Medical Journal, Nov. 19, page 1657, "I now began to squeeze the heart as one does the bulb of enema syringe, and never shall I forget the kick and wobble, or rather thrill, that the heart gave in response to the very first compression. It reminded me of the feel of a trout when one grabs it below a bank or boulder. I kept pumping away and all the symptoms disappeared. the first symptom of revival being contraction of the pupil. The patient to this day wonders why the upper wound was necessary to remove one little appendix".)

Gastric Cancer in Relation to the Female Genital Organs.

Runge (Beitrage Zur hlinischen chirurgie) says that authors are almost unanimous in regarding the stomach as the site of the primary temor when coincident ovarian cancer and gastric cancer are found. Metastasis of malignant disease in other organs seldom locates in the stomach; Mengerhausen found no metastasis in the stomach in sixty cases of malignant ovarian disease. The metastasis from the gastric cancer is especially liable to locate in the ovary as the cancer cells are moved along by the intestinal peristalsis, ascites, etc., and alight on the ovaries, the epithelium of the ovaries being particularly permeable for corpuscular elements, the vessel supply of the ovaries also favoring the development of malignant tumors. The congestions, wounds and scar formation in the overies connected with the ovulation process are all factors which enhance the predisposition of the ovary to cancerous growths above that of other organs. The patients are generally between 20 and 40 years old, and amenorrhea is constant when the tumors have daveloped at all. The symptoms on the part of the stomach are overshadowed completely by those from the ovaries. If noted, they are generally considered merely accompanying manifestations of the ovarian trouble. As a rule, both ovaries are affected. The correct diagnosis has been only rarely made; generally the gastric tumor is overlooked. In any operation on the overies the stomach should be carefully inspected for possible primary cancer, and the ovaries examined in all operations for gastric cancer, and they should be removed at the slightest sign of enlargement. Some authors advocate removing the ovaries always when there is gastric cancer, even when merely a palliative operation is possible. In a few cases on record a gastric cancer developed

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during a pregnancy and was the cause of uncontrollable vomiting. In such cases the vomiting commences in the second month of pregnancy or later, mostly in women who had no tendency to vomiting in previous pregnancies. The gastric cancer in these cases seems to run an unusually acute course and the enlarging uterus renders diagnosis difficult. Chemical examination of the stomach content is indicated in suspicious cases. Polano advocates immediate interruption of the pregnancy, followed by removal of the gastric tumor when a cancer is discovered in the stomach of a pregnant woman, although cases are known in which a healthy child was born at term even under these conditions.

Unexpected Results of Treatment of a Syphilitic Child by Injection of its Mother with "606."—Taege (Much, med. Woch) mentions the treatment of a new-born baby of a syphilitic mother, through the milk of the infected mother. The child was weak, apathetic, and hardly able to cry. After the injection of the mother improvement of the child began at once. It became rosy and strong, cried aloud, and nursed normally.

Duhot (Munch med. Woch.,) reports the case of an infant born with hereditary syphilis, in whom an absolute disappearance of all symptoms was obtained by the treatment of the mother with an injection of "606." This was an altogether unexpected result. The action of the drug was carried in some way to the child through the mother's milk. The mother had been rebellious to mercurial treatment, and was subject to severe ulcerations. Her child was born with red, wrinkled skin, and the appearance of an old women; the cry was weak and suckling was difficult on account of snuffles. A few days after birth syphilitic pemhigus appeared. The mother was injected with 0.5 gm. of "606." Three days after the injection the appearance of the child began to change. The skin lost its redness and became soft and white; the eruption vanished, as well as the nasal catarrh. The child was soon a rosy, blooming, baby, and gained rapidly in every way. It has been questioned whether even better results would not have been obtained by a direct injection of the child. Injection of the infant syphilitics has just as good an effect on the syptoms, but unfortunately the amount of toxin that is liberated by the death of the organisms causes it to fall and die. Ehrlich has warned us of this result. It is believed that the antitoxin produced in the blood of the mother is communicated to the child by way of the milk, through which a neutralization of the toxins takes place. We must always consider hat the unkilled spirochetes may revive and renew the symptoms. Therefore, it is wise to inject the child, as saon as it seems allowable, with a small amount of the drug. The Wassermann reaction will be of use here. The best method of treatment of a nursling is by treating the mother and allowing the milk to do the work of cure.

Infantile Malaria.—Cardamatis (Arch de med. des enfants,) records the results of his study of malaria among the children. The Dr. finds that all sorts of troubles are imputed to malaria from lack of diagnostic ability. The study is based on cases in which the malarial protozoon was found in the blood by microscopic examination. During the suckling period the child is less liable to be attacked by malaria than later in life. Up to the age of three months malaria is quite rare, increasing in frequency up to twelve months. There is a relative immunity during the first month of life. Morbidity from malaria is less up to the age of one year, probably due to the greater care taken by the mother. Malaria is especially frequent between the ages of two and three years. He does not believe that it has been shown that the parasites can be communicated to the infant through the placenta. They are to be found on the maternal side of the placenta, but not on the infantile side. The Dr. has observed newborn children in perfect health when their mothers were afflicted with severe malaria. In twenty cases of maternal fever the blood was examined in the mother, the fetus, the placenta and the cord, and the protozoa were never found in the cord, placenta, or organs of the infant immediately after birth. Malaria may be either acute or chronic in infants; but generally the chronic form is due to neglect in diagnosis and treatment of the disease. The disease appears somewhat irregularly in children.

SPECIFIC SKIN AFFECTIONS

"I have had remarkable success in the treatment of tertiary syphilitic eruptions and ulcerations with Resinol Ointment," writes a prominent eastern physician. Continuing, he says, "With its aid I healed an extensive ulceration of the skin covering the whole right side of the nose. This case had resisted all of the usual remedies."

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The chill is absent or abortive, and sweating is absent. The child becomes cold but does not have a true chill. Convulsions and vomiting are frequent. The fever lasts from three to six hours. The spleen is usually enlarged, sometimes enormously. In chronic malaria we see a true cachexia; the child has a complexion like wax, anemia is extreme, the body emaciated, and the spleen enormously enlarged.

Nephrectomy and Pregnancy.—Pousson (La Gyn.,) states that the remote results nephrectomy and the organic resistance of these individuals who have undergone the operation, and whether they should marry.

GERMILETUM

A SUPERB ANTISEPTIC, GERMICIDE AND DEODORANT. Non-toxic, non-poisonous, non-irritating, slightly alkaline, almost a specific in Catarrh and Eczema. An elegant, cooling, deodorizing Antiseptic for the sick room. Par excellent in Obstetrical practice and wherever an Antiseptic is required.

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The Dr. gives the results of sixty-six operations collected from medical literature. It has been shown that after removal of one kidney the remaining organ takes the place of the two kidneys, through hypertrophy of the parenchyma, the elements increasing in volume, and the epithelium multiplying by karyokinesis. The diseased kidney is also capable of this multiplication. This increase is a permanent one and results in increased urinary action. When a diseased kidney had been removed the lesions of the opposite kidney may be seen to retrocede and disappear. All the sixty-six patients became pregnant and there were but seven abortions. Several were pregnant as many as three times without accident. At the time of reporting, all but five patients were alive and well. Of these five, three died of tuberculosis, one of typhoid, and one in the third pregnancy after the operation. If one is asked whether such a patient should marry an affirmative answer should be given only after repeated examinations of the urine and careful observation of the patient. If there are polyuria and albuminuria marriage should be forbidden. The nature of the disease for which nephrectomy was done is important. If done for cancer there can be no propriety in marriage; if for tuberculosis marriage is proper, since these recoveries are general. For lithiasis, pyonephrosis, or pyelonephritis the prognosis is not quite so good as for tuberculosis.

Nail Extension in Fractures.

Anschutz (Deut. Ztscht, f. Chir.) believes this method of value in several cases in which ordinary extension proved unsatisfactory. It is particularly adapted for the treatment of complicated fractures. As the nails are driven only into the distal fragment the rest of the limb is left free, while the force of the traction may be enormously increased, so that even in chronic cases the shortening of the limb is overcome in a remarkably short time. Besides, the procedure is not painful. The only disadvantage is that soft bones may be split by the nail, as the author has observed in two instances. This, however, can be obviated if the nail is driven into the compact diaphysis at some distance from the epiphysis. Although there is a possibility that the insertion of the nail through the skin may cause infection, the author makes light of this objection, though he has observed slight infection of the wound in two instances. Excellent results were obtained in two cases of pseudoarthrosis, in which callous formation speedily occurred, and in another case of shortening of the femur of 9 cm., this was reduced to 7 cm., notwithstanding that the procedure was resorted to 143 days after the injury. While the method should be employed only in exceptional cases in which extension fails, and only in the hands of surgeons acquainted with the technic, it is a very valuable resource where other measures fail.

A New Serum Reaction for Syphilis.

W. de la Motte (Deutsch. med. Wochenschr.) says that in spite of its great diagnostic value, the Wassermann reaction can never become a routine method for the practising physician, so long as its performance requires a well-epuipped laboratory and a trained bacteriologis. Many attempts have been made to simplify it or to substitute simpler tests, but so far these have not been altogether successful. He reports promising results with a substitute that was first suggested by Porges. The method in brief is as follows: Equal parts of clear blood serum from the patient to be examined and of a one per cent. solution of sodium glycocholatee are mixed in a small test-tube, which is then set aside for sixteen to twenty hours. At the expiration of this time, if the reaction is positive, a precipitate has appeared, which usually forms a small clump, floating on the surface of the mixture. He made simultaneous tests of the Wassermann and the Porges reactions in a considerable number of syphilitics. On the whole, the two methods gave results that correspond pretty well; certainly, in his hands the Wassermann test did not seem superior to that of Porges. The method clearly deserves further trial.

The Charlotte Medical Journal

VOL. LXII CHARLOTTE, N. C., MARCH, 1911. No.3

Salvarsah in the Treatment of Syphilis.*

By A. J. Crowell, M. D., Charlotte, N. C. Prof. Genito Urinary and Rectal Diseases in the North Carolina Medical College, and in charge of this Department in the Charlotte Sanitorium, Charlotte, N. C.

The announcement some two years ago by Prof. Ehrlich, of Frankfort Germany, of the discovery of a specific for syphilis, marked an epoch in the history of medicine unsurpassed, and probably unequalled by and previous one.

Jenner, in the discovery of vaccination, placed the world under a dept of gratitude for which she can never repay. Since the etiology of syphilis had baffled the greatest investigators of medicine, Schaudinn and Hoffmann, in the discovery of the spirochaeta pallada, did a work none the lees wonderful, and thus laid the foundation which made it possible for the greatest discovery of them all by Prof. Ehrlich of 606, or salvarsan. This makes it possible to blot out almost immediately one of the greatest maladies to which man is heir. Ehrlich's foundamental idea that a specific chemical affinity existed between special living cells and definite chemical substances was the basis upon which he worked to accomplish this result. This is his most valuable contribution to science.

Diptheritic antitoxine furnishes us a most ideal example of specific immuno-theropy. Here the antibodies are formed as products of complicated reactions on the part of the animal organism and are specific, that is, "they act exclusively on the respective bacteria or their products."

Unfortunately in syphilis the successful production of antibodies in the above manner has not been found possible, and we must attemp to kill the parasites chemically, as we do the malarial organism with quinine. Ehrlich addressed himself to the problem of finding some chemical which would destroy the parasite without injuring the host—some chemical that is very strongly paracitotrophic, and at the same time weakly organotrophic. Having observed the destructive action of various arsenic compounds on the protozoa inhabiting the the tissues of warm blooded animals, he started his experimental work with atoxyl. He was able to destroy with one dose of his 606 preparation all the treponema in the testicles of experimental rates. Under the trade name of Salvarsan, this preparation is being used at present to combat syphilis in man with apparently very favorable results.

DANGERS.

The question of dange, or contra-indications for its administration should not be overlooked. It would be a marvel should a drug so powerful in the destruction of living parasites within the body be void of danger, either immediate or remote. Certainly mercury or iodide of potassium do not form exceptions to this rule. It is remarkable that, in the many thousand cases in which Salvarsan has been administered, so few untoward results have occurred. Prof. Ehrlich has advised against the administration of the drug in patients suffering from advanced cardi-vascular disease, in those suffering with lesions of the optic nerve, kidney or lung. However, cases of malignant syphilis as sociated with tuberculosis, as is usually the case, have been reported greatly benefited by its use.

In parasyphilitic affections the drug will not often be indicated, since both tabis and general paresis are too far advanced before the diagnosis is made. If recognized in their incipiency, good results may be obtained, and it should always be tried. As a prophilactic measure against the spread of the disease. Salvarsan should be invaluable, because of the rapidity with which the organisms disappear from the lesions after the administration of the drug.

METHOD OF ADMINISTRATION.

As you are well aware, three methods have been recommended for the administration of this drug, namely; subcutaneous, intermusclar and intravenous. We have had no experience with the subcutaneous method. November, 1910, we received five doses of this preparation from the Rockefeller Institute for Medical Research, and administered same intermuscularly. This was the method in use at the Rockefeller Institute at that time.

Immediately following the administration of the drug in each of these cases, it was necessary to resort to morphine to relieve, not only the local pain, but that extending down the leg along the sciatic nerve which persisted for three or four days. Following this, the local reaction at sight of injection (gluteal region) was so well marked in two of these cases that sloughing was anticipated. Although the inflamation subsided

*Read before the Trio- State Medical Association at Raleigh, N. C. Feb. 23, 1911.

in about ten days, a palpable induration stills remains,

The five cases were as follows: One primary chancre of three weeks stanging and beginning secondaries two with late scondary manifestations and two tertiary. In the case of chancre and the two cases of late scondaries, the spirochaetæ were abundant, as evidenced by examination with the dark ground illuminator. Three days following the injection in these cases, there was a total absence of the spirochaetae. The labia and anal region of one of these cases at the time of treatment was a solid mass of ulcerated condilomata, and the mouth one mucous patch. Spirochaetae from the papules in this case were the most numerous I have ever seen. These disappeared in three days, and the papules and mucous patches healed completely in one week, and the patient discharged fiom the hospital. Wassermann reaction slighly positive six weeks later.

Another case that deserves special attention is as follows; Mr. H., 34, laborer by occupation. Refferred to me by Dr. Wright. Family history: mother and one brother died of scrofula: the remaining members of the family apparently healthy. Past history: was perfectly healthy until four years ago, when he received an injury by falling on a standard of a wagon, which produced a very ugly injury of the rectum. This was very obstinate in healing. About two years following this injury, ulcerations appeared on different parts of the body. These were very resistant to the usual specific treatment, and, instead of improving, new ulcerations would develop from time to time. The patient denied ever having any previous manifestations of syphilis, but acknowledged having had several attacks of gonorrhoea. At the time he came under my care, he had large gummatous ulcerations in the right inguinal region, the right ankle, on the back near crest of the illium- and an enlarged gummatous testicle. These had resisted the usual syphilitic treatment for months, and a large gummatous ulceration was developing in the popliteal space. This was so painful as to prevent complete extension of the leg. The drug was administered on the 1st of January, and in three days the ulcerations were very noticably healing, the testicle very much reduced in size, and the patient feeling much improved. He was discharged from the hospital in ten days with the gummatous ulceration fully half healed, and the testicle almost normal in size. The picture which I show you was taken a day or two after he entered the hospital. and will give you and idea of the extent of the ulcerations. There was absolutely no treatment instituted for the local scores, and they completely healed in fifteen or twenty days.

The Wassermann reaction was positive, and, until it was made, there was some doubt as to whether or not it was syphilis, because of the fact that they were unable to control the symptoms with the ordinary anti-syphilitic treatment. The Wassermann reaction is still slightly positive, and the patient will receive another dose of Salvarsan in a few days.

CHOICE OF MODES OF ADMINISTRATION.

From our experience in the administration of this drug in thirty cases, five of which were given intermuscularly, and twenty-five intraveously, we have found that the administration of the drug .intermuscularly is far more painful. The local reaction at the point of injection very decided, leaving an indurated mass, and in each case producing a temperature ranging from 99 to 103. These patients also complained of severe pain in the head, back, and radiation down the thighs, similating sciatica. and in each of these cases, it was necessary to give morphine to control pain.

In the twenty-five cases of intravenous administration, there was no special pain at the time of injection, or local reaction following. In two cases, there was slight nausea and vomiting, which was attributed to indiscretion in diet. In three cases, traces of albumen were found, in others slight purging, and in one case, a decided amount of albumen. In this latter case 0. 6 grm. was given intravenously, which is a larger dose than is usually given by this method, 0. 5 grm. being the usual dose for males.

Of the plans of administering this drug, the intravenous is far superior, provided the drug is properly prepared and carefully administered. This should be done in the operating room under strictest asceptic precautions. Particular care should be exercised to prevent the introduction of air into the veins.

In conclusion will say that the results obtained from this drug are almost unbelievable. Of course sufficient time has not elapsed since the beginning of its administration to know if the seeming cures are permanent. Certainly no drug has been discovered up to the present that equals it in results. Of the thirty patients treated, sufficient time has not elapsed to expect a negative reaction, except in the first eight cases to which it was administered. Of these, six have become negative and two remain positive.

Ehrlich and His work.

By Robert H. Lafferty, M. D., Charlotte, N. C.

Immediately in the wake of the reception of the Noble Prize for medical research, followed by $10,000 from the Rockefeller Institute, the announcement of the discovery of a sure and speedy remedy for Syphilis, the most vicious and wide spread of all blood diseases, has made the name of Paul Ehrlich a well known one to the medical world and not unknown even among the laymen.

Very worthy, is he, to be classed among the master minds in the history of science and we feel that his name might well be inscribed with the illustrious trio, Claud Bernard, Helmholtz and Pasteur.

You will be surprised, in turning the pages of modern medical literature, to find how often this name occurs, and when we see what he has done in Histology, Bacteriology. Pharmacology, Diagnosis and Treatment, we are filled with astonishment, and wonder how one man could have accomplished so much in so short a time and also how we ever could have done anything without this great German doctor of Frankfort-on-Main.

I shall attempt to show, that this, his last great discovery. is but a logical outcome of years of work, and must be but a step toward greater discoveries that may be of even greater benefit to mankind.

We learn from the current press that he is a man of about 57 years of age; in statue, below the average; in disposition earnest, thorough and sensible; a man of great energy and wonderful imagination. Visitors find him constantly smoking and the cigars he smokes are said to be good ones. Some visitors remarked that the salary he gets from the state would not keep him in cigars much less run his laboratory, but fortunately he married a woman of means and has received several gifts endowing his work along different lines, so he has been able to continue his research.

As a college student he did not play a stella role, but was frequently so absorbed in his own research work that he neglected class and the routine work of college life. Finally, however, he was given his degree, more on account of his great research than for his work in the regular curriculum.

Looking at his life work from this vantage point one is not surprised to see that in his earliest work we have appearing those fundamental ideas that have been so beautifully developed and that have at many points along the line of their development, given us some of our best and most valuable assistance in Diagnosis and Treatment.

He it was, who, in 1880 while experimenting with the aniline dyes found that certain living cells had greater power of combining with certain dyes than other cells and in contact with a combination of dyes that the various cells had a selective power for different dyes and along this line he continued his work until now we have methods by which we can study with ease the different cellular tissue both normal and pathological.

A few years laler he found, accidentally it is true, while experimenting with blood smears how the smear could be set and hardened by heat, and what stains the different cells would take, so that now in the stained smear we can easily differentiate between the different kinds of corpuscles and Ehrlich's Triacid stains is still a most valuable reagent.

Another of his early experiments with dyes gave us a method of staining the Tubercle Bacillus and even if we are not actually using this method extensively today, we are using a similar method that resulted from his work.

But let us degress for a moment with the young doctor and see another test that has made his name familiar, viz. "Ehrlich's Diazo Reaction".

In 1882 he tried to discover the unknown substance in the urine that reacted with some diazo compound giving red color. It has never been found positively what gives these reactions in the urine. We do know that zanthin, hypozanthin, quanin, tyrosin, hystidin and many other similar products will give the color, but what it is that is present at one time to give the reaction and absent at another time and why is it that some diseases give it more frequently than others is not known. It has been found positive quite frequently in Typhoid Fever, Milliary Tuberculosis, and Erythematous Diseases and at one time it was thought it would be a very valuable diagnostic measure in early Typhoid but following the work of certain German chemists it is beginning to be considered of less value. Engeland claims that a slight excess af the nitrite in the reagent will give the color, and so many other factors enter into the reaction that we are compelled to leave the question as to its value open for further investigation. And just in this connection I might mention "Ehrlich's Egg-yolk Reaction" which he discovered about the same time and is said to be characteristic of Pneumonia, being in nature a sort of preliminary diazo reaction.

But to return to his work on the idea that has predominated during his whole career, which has been stated as follows: "Each

*Read before Mecklenburg County Medical Society, January 17, 1911,

and every type of living cell including bacteria and other parasites, has a specific affinity for some peculiar substance." This affinity, you see, is illustrated in the union of different cells with various anilin dyes and this affinity he proved to be true both out of the body and with the tissues while in the body. Added to this he noted some well known affinities in Pharmacology, for example, strychnine for the nervous tissue, pilocarpine for the sweat glands, etc, All of which firmly convinced him that he was on the right track and so with the thoroughness and pains-taking care of his race he turned to the study of immunity, which to a less imaginative and farseeing person seemed to be a wide digression, but from what we know now we see it was along the same line of his life work.

He began by rendering certain of the small animals immune to various poisons by gradually increasing the doses. He carried his research into the field of bacteria and his work fitted so beautifully with that of Behring on Diphtheria antitoxin that we can hardly think of antitoxin apart from Ehrlich; for he it was who established the method for measuring the antitoxin and for years the standard unit of measure for the world was sent from his laboratory, and today all antitoxin made by the German Government is tested in his laboratory before it is sent out. Furthermore it was Ehrlich who first made the strong antitoxin which reduced the dose from five or seven ounces to a fraction of an ounce and it was Ehrlich also who first demonstrated the "negative phase" of which in recent years we hear so much.

In order to understand and explain his work on immunity his fertile brain formulated a wonderful theory known as "Ehrlich's Side Chain Theory of Immunity". Taking his cue from the formation of the side chain in the cyclic compounds in Organic Chemistry he drew a wonderful comparison between the formation of new compounds here and the union of toxin and antitoxin to form a new and inert compound. In his later works he calls the side chin the receptor and conceives that the receptor is made to fit the combining cell as a key does a lock. Supporting this theory he has done much very valuable work which will stand forever, even if the theory is deserted or disproven.

During his work on immunity, in which you see he still followed his fundamental idea of chemical affinity, he discovered many important things connected with the interesting subject. We have mentioned the "negative phase" and also showed that immunity could be transferred from mother to offspring either in utero or by the milk.

Then we may imagine as this wonderful man reviewed his work of years he must have reasoned something like this: If certain poisons have the marked affinity for certain tissues, if certain substances called antitoxin neutralize, probably by chemical action as an acid neutralizes a base, certain bodies known as toxins, why cannot I find a certain substance that will destroy various bacteria and parasites and not harm the surrounding tissue and the host". It is a known fact that there are many chemicals that will kill microorganisms, but the trouble is they kill the organ also.

Ehrlich classifies poisons as parasitotrophic, those that kill the parasite and do not harm the organ, and the organotrophic, those that injure the organ. So we see this master mind seeking for some parasitotrophic drugs that present the proper affinity. He first, I believe, undertook tuberculosis but finding so frequently a mixed infection here he wisely left it for the time and we see him next called from his research work on Germany's great scourge, cancer, to investigate sleeping sickness and after much work he found that arseno-phenyl-glycin was the drug that would kill this spirillum and not harm the patient. The investigation of this was not carried very far into the experimental stage when the more urgent demand for the treatment of the kindred disease, syphilis, was made and the work begun.

After investigating 605 preparations the 606th or dioxidediamidoarseno-benzol or salvarsan, as some call it, was found to possess the proper affinity for the spirocheta pallida and the whole world sat up and took notice.

Doctors from the world have flocked to this Mecca of science and have been welcomed and sent away blessed with the knowledge of this remedy and with some 606 to use. Over 10,000 cases have been reported as treated and the cure speedily effected, except in the very fewest cases.

Hundreds of physicians are using this drug, not only in Germany and France but in America and I am delighted to say it is being used with success right in our city.

And so Chemotherapy has scored success riveling that of Serumtheraphy and the great discoverer deserver all honor and support from the medicnl world and we hope many years may be spared to him and that parasitotrophic drugs may be discovered possesing the affininity for all of our pathogenic bacteria.

An Unusual Case of Disturbance of Equilibrium occuring as a Reflex Manifestation of Hypertrophied Tonsils and Adenoids.

By R. B. Hayes, M. D., St. Lukes Hospital, Fayetteville, N. C.

While the knowledge of the direct and reflex manifestations attributable to hypertrophy of the adenoid tissues of the pharynx with the consequent obstruction to respiration and interference with normal ventilation of the middle ear, such as mouth breathing, susceptibility to catarrhal inflammations of the respiratory tract, earache, deafness, headache, night terrors, anemia, lack of physical development, inability to concentrate the attention (Guye's aprosexia) etc., is the common property of us all; yet the unusual features of the case to be reported, the difficulty and uncertainty of the diagnosis, and the happy result of treatment warrant me in bringing it to your attention.

The patient, an Indian boy about three and a half years of age; was referred to us for diagnosis and treatment, coming under our care June 19, 1910.

The history of the case as elicited from the mother, was as follows:

Birth was normal and without incident of any sort out of the ordinary, the child being the fourth in a family of five, all healthy, robust children.

He was always healthy until the beginning of the present trouble. January 1910, when it was noticed that he appeared unusually awkward, frequently stumbling and falling, having some hard falls occasionally.

At the table, also, this awkwardness was manifested by his dropping articles which he was holding, and at times, nodding and falling forward, or even from his seat. Would always quickly recover himself however, and go on with the meal as if nothing had happened.

This condition grew worse so that he would frequently fall when he was sitting or standing perfectly still.

Oftentimes he would strike his head bruising it badly, but at no time did he have a convulsion or lose consciousness.

From these falls if he had hurt himself, he would arise crying, but would soon be playing again as usual. The seizures occurred, at first, at intervals of from one half to two hours; but later increased in frequency until they were occurring at intervals of fifteen or twenty minutes when patient was brought to the hospital.

They were always immediately preceded by a sort of hiccough and even when lying in bed this hiccough would be noticed and the mother said that, had he been standing at the time, she was sure he would have fallen.

The attacks, which were always more numerous in the earlier part of the day, became so frequent, and the falls so severe that it was feared that serious injury might result.

In the mean time the patient's general condition had not suffered. He ate and slept well and in all other respects was strong and healthy. In disposition. however, he was more irritable and cross than formerly,

No history of subjective symptoms, dizziness. tinnitus, etc., could be obtained.

There was nothing in the previous or family history having any bearing on the condition of the patient.

Examination showed him to be a sturdy, well-developed boy, with a bright intelligent countenance.

Over the head and forehead were a number of bumps, ecchymoses and abrasions, the result of contact with the floor or furniture during the falls referred to above.

Examination of the eyes and ears was made by Dr. J. M. Lilly, who found the eye grounds to be normal and only a slight hyperemia of the tympanic membranes.

Subjective tests of vision and hearing could not be made owing to the youth and diffidence of the patient; but the mother had noticed no defect either of sight or hearing.

The tonsils were moderately hypertrophied and there was also co-existent adenoid hypertrophy.

There was no glandular enlargement, either cervical, axillary or inguinal.

The trunk and extremities were well developed with no evidence of rickets.

The superficial and deep reflexes were normal.

Nothing abnormal was discovered with either the thoracic or abdominal viscera.

Phimosis existed; but apparently it caused no obstruction to urination.

Examination of urine and stool was negative.

While under observation the patient had numerous seizures which. in accordance with the statement of the mother, were most frequent in the early morning. becoming less so toward noon and occuring rarely or not at all in the afternoon.

In a typical attack the child, while sitting or standing, would fall suddenly. as if shot, his head usually striking the floor or surrounding objects with considerable force. There was no constancy as to the direction of his fall; but usually it was either backward or forward; less frequently to one side or the other.

*Read before the Fifth District Medical Society at the meeting January 10th, 1911.

The fall was always preceded by a slight noise resembling a hiccough, a short inspiratory, laryngeal stridor.

Immediately, the child would arise crying and run to his mother who would pacify him, when he would resume his play, only to have a recurrence of the attack within fifteen or twenty minutes,

Between the seizures, when he would be sitting on the floor or bed playing with a toy, his countenance would gradually lose its expression, the eyes assume a vacant, far-away stare; the head droop forward, as that of one dozing in a chair and the toy fall from his hand.

Then with a start; but without the stridulent noise he would sit erect, pick up his plaything and continue to play.

This is not unlike Osler's description of an attack of *petit mal*. "Suddenly, for example, at the dinner table, the subject stops talking and eating, the eyes become fixed and the face slightly pale. Anything which may have been in the hand is usually dropped. In a moment or two consciousness is regained and the patient resumes conversation as if nothing had happened."

In this case, however, if there were any loss of consciousness it was of a most transitory character and could not be definitely determined.

The etiology of the attacks was obscure and the diagnosis peculiarly difficult, as nowhere, in the literature at our command, could we find any description of a closely similar condition,

Among the less common reflex disturbances due to adenoid hypertrophy, Holt mentions catarrhal spasm of the larynx (spasmodic croup), bronchial asthma, enuresis, stammering, chorea, and epileptiform seizures, (though he has seen neither of the latter).

He, also, in the chapter on epilepsy, says that "As reflex causes of epilepsy may be mentioned phimosis and adnoid vegetations in the pharynx".

Semon and Williams, in Allbutt's Sytem of medicine, say that "Asthma, stuttering and stammering, laryngismus stridulus, chorea, nocturnal enuresis, and even convulsions and epilepsy are among the neuroses that have been attributed to the presence of adenoids".; but warn against the indiscriminate association in the relation of cause and effect, of the coincidence of either of the two last conditions with adenoids.

The same authors speak of a form of spasm of the larynx followed by vertigo and loss of consciousness to which Charcot applied the name of laryngeal vertigo. Holt, also makes mention of a so-called laryngeal epilepsy similar to the preceding.

A form of aural vertigo (Meniere's Disease), was described by Meniere in 1861, associated in his case, with hemorrhage into the semicircular canals, in which the clinical manifestations were sudden, unilateral deafness, giddiness, tinnitus, vomiting, a tendency to faintness, vaso-motor changes (flushing pallor, cold sweats) and nystagmus.

Other writers have described apoplectiform or labyrinthine vertigo, conditions having various pathologic findings; but showing Meniere's symptoms.

P. McBride in Allbutt's System of Medicine, says "Giddiness may be caused by changes of tension in the middle ear", and Barr, in the same work, speaking of the symptomatology of diseases of the ear says, "Vertigo as a sign of ear disease is far from being rare".

Our patient's condition was clearly not identical with any of the above, yet it was undoubtedly a neurosis, the only reflex causes for which as far as we could ascertion were the hypertrophied tonsils and adedoids or the phimosis.

Operation was advised for both conditions; but consent could not be obtained to the circumcision.

However the tonsils and adenoids were removed by Dr. J. M. Lilly, under ether anesthesia, and the patient allowed to leave the hospital the following day.

His physician reported to us, that, after ten days, improvement was noticed and that this continued steadily until the attacks ceased altogether, and there has been no recurrence although several months have elapsed since the last.

That the disturbance of equilibrium in this case was due to changes of tension in the tympanum owing to interference with the function of the Eustachian tubes either by the tonsils or adenoids (more likely the latter) we believe has been pretty definitely established by the result of the operation; but as to the frequency of the seizures in the morning as compared with the decrease in frequency and ultimate cessation later in the day, we are at a loss for an explanation; unless it may be that in this, as in other chronic catarrhal affections of the upper respiratory tract, the congestion and consequent interference with function was greater in the morning than later in the day.

We regard the refusal of the mother to permit circumcision, in the light of subsequent events, to have been fortunate rather than otherwise, for, had circumcision been done, there would have still remained the doubt as to whether the pharyngeal condition or the phimosis was the etiologic factor.

The Babe, From the Doctor's Standpoint.

By I. A. McSwain, M. D., Paris, Tenn. Ex-President Tri State Med. Association of Miss. Ark. and Tenn. Ex-President Tenn. State Medical Association Secretary West Tenn. Med. and Serg. Asso.

Several years ago in ecclesiastical circles quite a discussion went the rounds of the religious press on the question, "Has the day of miracles past?" It is rather strange that any one could afford to champion the negative of this question, for if a miracle be defined as something not explained by commou laws, or something not undestood by the common mind, then surely there are more miracles in the universe than any thing else. The most common occurrences are often the least understood.

There is nothing more common than babies, yet there is nothing in the great wide world that we know less about. A babe is at once the most diffident and the most reserved personage that we know. He has a strange way of concealing his identity from the scrutinizing inspector. He has eluded the wisest sages and philosophers of the world in all the ages as the have sought to analyze him.

He is a heterogeneous compound of mind and matter and appears to be endowed with some subtle supernatural constituent called soul or spirit. In common also with some other animals he seems possessed with an intuitive principle (the first manifestation that we behold in thts prodigy of the ages) and which we call instinct.

Instinct is that faculty which acts independently of reason and when allowed full sway dominates all other faculties. In the human being, after having served its purpose, it gradually gives way to reason and experience.

In order to treat the little stranger with becoming hospitality and contribute in the best possible manner to his comfort and future welfare, we should apply ourselves to the study of his native instincts, his appetites, his passions and his possibilities. We cannot appreciate them unless we know something of his anatomical and physiological structure and of the general laws of digestion and assimilation, absorption, secretion, and excretion. We cannot in this disertation enter into a descriptlon of all of these, but merely refer to them as essential to the proper understanding of child life, and pass to consider the more practical side of the question, viz (1) Bath, (2) Clothing, (3) Food.

Simple as these things appear to be, they are fraught wiih incalculable importance and we may add are shamefully misunderstood and misapplied to the serious detriment of the child, often laying the foundation of disease and even compromising life itself. The physician is derelict in his duty and negligent almost to criminality should he fail to give minute instructions in regard to these three most important factors.

Remember that no effort is spent in vain that deals with the welfare of humanity along the lines of physical, mental and moral advancement, and as the highest type of mental and moral excellence is the product of a healthy and vigorons body—the basis of which is laid in the proper management of infantile life. Therefore the doctor is the custodian in a large measure, not only of the health and normal physical developement, but also of the mental and moral characteristics of his clientele.

The babe is born. It is covered from head to foot with a coating called vernix caseosa, which, now that it must wear clothes, should be removed. To do this successfully, hog's lard is among Gentiles at least indispensable, and we think that our Jewish brethren might so far abandon their prejudice as to apply this substance to the child, notwithstanding their national hatred of that animal, for it is par excellence for the purpose indicated.

Having "greased" the babe well with this unctious substance, dip him into a bowl of warm water into which a little soap has been dissolved, and while in the water rub the body with the hand or a soft napkin until moderately clean. Then remove the child from the bath and wrap him up in a soft piece of cotton cloth on which he should be dried. All this should occupy only two or three minutes and we are ready for his clothes.

I would disdain to give utterance to a sentence that would do violence to a mother's forethought in providing in advance for the comfort of her offspring. For she has had no doubt a keen sense of pleasure in getting up its elaborate wardrobe. Let us ask her permission, however, (as we are not prompted by curiosity or any other motive save the comfort of the babe), to take an inventory of the private basket or drawer wherein are contained these various garments which the fond mother at odd times and in the most secretive manner, has prepared to adorn and beautify the coming idol of the household. The child is reasonably expected to be at it birth about eighteen or twenty inches in length, but the dresses are from six to eight feet long, made of stiff, starched material. ruffled and flounced, with long sleeves which are entirely too small. The undergarments are flannel. The napkins are of rough. heavy cotton, even the band is starched and unwieldly and the whole outfit, while it might

be creditable to the inventive genius of the woman and would look well on an inanimate doll, or would attract attention in a show window, is totally unfit for the purpose for which it was intended.

Imagtne any other animal except a human babe done up in all this stiff, uncomfortable dress. How quickly would teeth and claws be applied by the imprisoned animal to resent the insult and to free itself from the useless incumberance. The babe would do the same thing, but alas, has not the strength. for Nature, presuming that an infant child would at once be cared for by its patents, who were supposed to be endowed with reason, did not equip it with weapons for its defence and hence it must now tamely submit to tne whims and caprices, pride and foolishness of those having rule over it. When incased in all its unwieldly attire, it certainly tickles the vanity of the mother and she is delighted by the complimentary remarks of the visiting women. But the comfort and welfare of the helpless innocent is sacrificed on the altar of an old dame called fashion whose decrees are empirical, and, devoid of reason, but she imposes her edicts upon helpless innocence with the same arbitrary ruling which she exercises over all her subjects in the various stages of life. Is it any wonder that the babe starts and cries out in its sleep, breaks out with the "hives" and is restless and fretful?

That it should be clothed, we admit, but the garments should be made of softest texture, of suitable length, loose fitting, easy of adjustment and entirely free from starch or ruffles. In short, made for convenience and comfort rather than for show.

Another mistake in connection with its clothing is the pernicious custom of covering up entirely the babes face and head under the bed clothes, and forcing it to breath the confined air, deficient in oxygen and charged with the exhalation of the mothers's person and perhaps of the father too, who in his loving way goes to bed with the mother and infant, with a breath contaminated with tobacco or liquor, draws up the covering over himself and wife and the little fellow is literally buried under several thicknesses of bed covering and there wrestles with the problems of human life. by trying to maintain a feeble existence under very embarassing conditions.

Let the physician or nurse who is accessory to such a.crime as this, try the experiment by placing themselves under a huge pile of quilts, blankets and coverlets, saturated by emai ations from the bodies of men and women for months, add to that the fumes of tobacco nicotine. or the foul breath of disordered digestion or diseased throat and lungs, onions, garlic, liquor, etc., and then say you how long life itself would be tolerable under such conditions.

The babe should, from the first hour of its life he allowed to breath pure air. The notion that it should not see the light, lest it should contract "sore eyes" or breath pure air lest it should "catch cold" is founded entirely on ignorance. God made the light first, then created the eye perfectly adapted to it, and a necessary stimulant for that delicate organ. He fashioned the lungs to take in great draughts of atmosphere, the oxygen of which is indispensable to all life, and we may be assured that neither light nor air in moderation can be detrimental. But on the contrary, absence of one or both is surely followed by most disastrious results.

Hence the room wherein the babe is to spend the first months of its life should be well ventilated. uniform in temperature with well regulated light and free from vapors, smoke and smells.

The writer only a short time ago saw a case of acute capillary bronchitis develope from a room saturated with smoke from a faulty grate which in a few days destroyed a well developed infant. Fathers often smoke tobacco in the family room, careless of its vicious effects on the tender babe. May not customs like these account in some manner for that large class of sickly infants, so many of whom pine away and die, no very satisfactory diagnosis having been reached, but which is set down as pernicious anemia or some other obscure disease, the nature and course of which is not understood? Or if perchance they manage to escape death, yet from abnormal and stinted development, the powers of resistance to disease is lowered, so that they fall an easy prey to the contagions by which the infantile world is, in a peculiar manner, constantly surrounded.

Parents have consumption, they sleep in the same beds with the children, eat and drink from the same vessels, expectorate the microbe laden supta on floor and walls, allow the children to breath the poisoned atmosphere, the whole tamily is exterminated. Popular verdict, "poor things, they inherited it from their parents"!

But we come now to consider the third factor in the babe's life—Food. It might be well for people to turn aside and study the habits and instincts of what are commonly termed the "lower animals." The first movement of the offspring is toward the generous udder, that nature in her wisdom has provided in the mother. Fortunately, however, the laws of society or inexorable customs of fashion have not "tampered" with this well spring of vital fluid,

as is so often the case in the "higher animals". No stays or corsets here, neither do we observe a disposition of the mother among the "lower animals" to decline to suckle yer young. But with apparent intense satisfaction and content, she places herself in amost convenient position, so that they may feed unstinted at nature's own commissariat. Would that in all cases this could be said in regard to the "higher animals." If so the problem of infant feeding, the Banquo's Ghost of the Doctor, would be, with few exceptions, solved forever.

The only philosophic food for the babe is the breast of a healthy mother. If she be not such, if she, from habits of her own, has not developed mammary glands sufficient for this crisis, she has by faulty training or errors, imbibed relative to woman's mission in the world, committed an awful blunder, and deserves pity for her deficient education. But if having the pabulum stored away in healthy and normally developed breasts, she disdains to nurse her own infant, but resorts to artiffcial feeding from a source of pride or because of her preconceived ideas or associations, she deserves censure for declining to meet the most sacred obligation of motherhood.

Put the child to the breast, soon after it is born. Do not allow the "aunties" to begin feeding it out of a spoon. If this were nature's method, a spoon would have been provided by nature. If the mother can nurse nurse it but will not, then commend her to the prayers of all good people that she may be saved from a high ctime against nature and her own offspring, and it might not be sacreligious to mingle with that a supplication that' as the child is hopelessly orphaned and disowned by its mother, it might be a merciful arrangement if the Divine Providence should take it to himself where it could be cared for.

But cases do present themselves, where from disease or actually deficient mammary developement, the mother is not capacitated to nurse hr babe. In that event, a wet nurse, if possible, should be provided. If that cannot be done, then what ? Just here steps in the ubiquitous manufacturer of foods. They are so much cumbered for the babe's welfare that they have fitted up immense establishments for the product of their wares, and to read their voluminous literature or hear their eloquent deliveries on feeding the babe, one might be persuaded that Dame Nature had blundered in creating mammary glands and lactel vessels, for except for purposes of adornment they might be regarded as useless appendages.

If the mother can not nurse her babe and a suitable person cannot be found as a nurse, the only suitable substitute is milk fresh and clean from the cow, properly diluted, sweetened with milk sugar and enriched by the addition of cream in proportion as nearly like human milk as possible. And in all cases this is to be fed the child from a nursing bottle, and never with a spoon.

In the country and in small towns this is easy, but until recently, to provide good milk for infants was very difficult in the cities. In a large measure this difficulty has been overcome by the establishment of milk laboratories where can be had the milk properly diluted and adapted to any age of the child, and in any quantity desired.

Water is essential to infantile life and the child should be early allowed water. A good rule is, before the child is put to the breast, to give it a few spooufuls of water. Babies often desire the breast more from thirst than hunger with the result of taking more milk than can be digested. Another important rule is that of nursing them at regular intervals. For the first two months the child should be nursed every two hours during the day and every four hours at night. Three to five months every three hours in the day and four hours at night. Five to eight months, four hours in the day and five to six at night. The practice of allowing the infant to nurse irregularly and, as some mothers do, all the time, especially at night is a most pernicious practice.

A reasonable supply or food should be allowed in the stomach and then a sufficient time should be allowed for its digestion and for it to pass out of the stomach before more is added. It must be remembered that the normal process of digestion is carried on in distinct stages or periods and an interference of the natural order by the introduction of new material into the stomach containing food partly digested is sure to be followed by more or less serious derangement of that important function. This rule applies to all stages of human life and its strict observance would set aside a long list of gastric troubles that we have to deal with in practice.

A sound mind in a healthy body coupled with a due proportion of moral excellence is the highest type of humanity. A healthy physical conformation is fundamental both to mental and moral acquirements. The bias recieved by the infant at the threshold of life will influence to a great degree those mighty factors that go to make up the weal or woe of the race. And no physician whose calling places him in the position of tutor to these kings and queens of the earth—the babies—should so far forget his

duty as to "despise the day of small things."

Read by Title Before The North Carolina Society for the Prevention of Tuberculosis. January 31st, 1911.

By H. B. Hiatt, M. D., Asheboro, N. C.

Mr. President, Ladies and Gentlemen:

(In all great movements there are many details to be worked out, many aspects and phases to be considered. Many plans to be discussed and many methods of attaining the same ends. In our tuberculosis fight we have many plans. many phases of the problem, and several methods of working. It is readily apparent that all of these cannot be considered at one time nor under one head. While some of us are urging registration, others are urging education. Some are asking your attention to one plan and some another.) I want to ask your attention to the INSTITUTIONAL CARE OF THE ADVANCED case.

It is not my intention to tire you with a lot of statistics and an endless chain of figures, neither do I intend to consume much of your time nor try your patience with a lot of theoretical consideratione. I want to ask that you will listen while I present the need and some of the effects of the sanatorial treatment and try to show you that, to be effective in our fight, we must while considering all agencies, lay greater stress upon senatoria for advanced cases.

(In the opening of the fourth session of the Tuberculosis Conference of the State Charities Aid Association, at Albany, New York, in March, 1910, the following prayer was offered by the Right Reverend Thomas A. Burke. This prayer appeals to me as being particularly proper upon this occasion. If you will bear with me just a minute I will read to you a part of it:

"In the name of the Father, Son and the Holy Ghost, Amen. We beseach Thee, Almighty God, to send down thy blessings upon thy servants, here assembled to devise means to combat the scourge that fills the land, that takes away a number of our most prominent citizens, that brings sorrow and grief to thousands of families and households. We know that it is true that Thou, hast given to us human reason by which we are to incline unto wisdom, and upon us, therefore, devolves the obligation of taking every means that science and experience would suggest to mitigate as far as possible the evils of this distressful scourge."

To intelligently study the tuberculosis question it is necessary that we not only study it as a whole but that we simplify it; divide it into its component parts and study these; study the various agencies of combating this "dread scourge", and by a process of comparison reach a conclusion of their relative merits. To be effective, to be successful, any attempts to control tuberculosis by preventive measures, aimed at the infectious agent will depend upon our realization of the great magnitude and the thoroughness of our work. We must cooperate and we must co ordinate. These are the essentials of success. Scattered, unrelated, desultory, half-hearted measures will accomplish little. We must have a thorough application of all the different agencies. We must look into and recognize the worth of and apply registration, dispensaries, visiting nurses, open-air cottages, fresh air schools, school inspection, meat and milk inspections, sanatoria for the incipient cases and sanatoria for advanced cases. Of all these agencies at present we are most interested in and the most needed are hospitals for the advanced cases.

In view of the irrefutable evidences of the possibility of preventing and curing tuberculosis it should be a matter of deep humiliation, my friends, to us all that we have among us today so many cases of uncared-for tuberculosis; and it should be a matter of especial concern with us in North Carolina, that while we have climbed, through the efforts of that great benefactor and educator, Charles B. Aycock, from the lowest rung of the educational ladder to near the top; and while through the efforts of that father of preventive medicine in North Carolina, Dr. Richard H. Lewis, and later Dr. W. S. Rankin, we have come forward and advanced in the matter of public health and preventive medicine, yet we are far behind many States in our treatment and caring for our tubercular sick and behind them all in our state board appropriation.

We have done great work in North Carolina in the care of the blind; the care of the unfortunate insane and bettering the condition of our prisoners, but yet, even in these cases we are not as strict as we should be. We do not isolate our tubercular in these institutions as strictly as we should. And while speaking of the segregation of the advanced tubercular in our various State institutions, a point occurs to me just here. Far be it from me to criticise the present executive of our state, and while I know that in this matter he has been actuated wholly by altruistic motives, yet within the past year I have noticed in the papers several instances in which long or short termed convicts have been granted pardons; wherein one of the principa lreasons for executive clemency was a condition of advanced tuber

culosis. Looking this squarely in face does it seem right; does it appeal to your idea of justice; is it proper to take a patient of this kind, when he is under state care because of his criminal action, and return this patient to an unprotected community; to a neighborhood whose knowledge of the prevention of tuberculosis, practically speaking, is nil? Does it seem right when we confine a criminal because we consider him dangerous to the public safety, later on to turn this criminal loose upon the public when possibly his dangerousness in one instance has been decreased? but, on the other hand, his dangerousness as an infective agency in tuberculosis is greater and in the end he will harm seriously a greater number of people than possibly had he been allowed to run rampant over the state, killing maliciously. The proper place to send such a person is to a sanatorium for advanced cases, and not turn him loose as a spreader of infection.

In consideriug the physical aspects or the sociological condition of these advanced cases it at once becomes apparent that the greatest need in handling tuberculosis is the necessity of publicity. We realize and the patient often realizes, that in every case he must have co operation; he must have help of friends and of neighbors; he must have help from a layman's viewpoint. Tuberculosis is not a condition that can be treated secretly. A man can come to your office, receive advice as to treatment and go away. This need of publicity, it has been stated, was one of the principal reasons for giving rise to the class methods of teaching and training incipient tuberculosis.

It is a fact that in our state the incipient has receiped consideration and emphasis at the cost of the advanced case. While the founders of our present efficient institution deserve great credit, yet I would emphasize the fact that advanced cases make incipient cases faster than the incipient cases can be controlled or prevented from becoming advanced, and it would seem to me that our present scheme of control of the incipient cases will have little affect ultimately upon the death rate in tuberculosis.

As we know, the relative length of the life of tuberculosis is three to five years. So it is reasonable to presume that the advanced stage in the average patient will occupy from one and a half to three years. Part of this time your patient is ambulatory and capable of some work; later he is confined to his home, and still later absolutely confined to bed. The fact is that the great per centage of these advanced cases have had little or no training. As you know, it is very difficult to get this class of population to attend lectures, read newspapers or pamphlets gratuitously distributed, or even to talk with the better class of the population or to show the slightest interest concerning health matters. Another reason is that among the poor, who constitute a large proportion of the State's population, diseases slow and insiduous in development and running a comparatively long course, are apt to have little or no remedial treatment. The physician is not called until the disease has developed to an extent which interferes with daily work. In many, many cases it is then past the remedial stage, and even if there should be hope of curing or arresting the process the family feels itself under the necessity of curtailing every expense possible. These families want as few visits as possible from the doctor. Unable to employ a nurse properly trained, the poor invalid relies upon such inefficient nursing as may be forthcoming from an overworked, and usually underfed family; receives such food as is at hand, improperly prepared, and has absolutely no means taken towards isolation. We must recognize and realize that these cases are not a matter of individual concern, but the concern and the object of apprehension of the entire community. Just as we are today isolating small-pox, scarlet fever and diphtheria we must isolate this advanced nucleus of tuberculosis infection; and to isolate properly it means the entire community must aid. None too poor to receive institutional treatment; none too rich to escape.

Dr. Newsholme, of London, presented a paper at the International Congress on Tuberculosis in which he showed from figures gathered from European sources, "That, so far as conclusions could be drawn from the data there was a fall in the death rate from tuberculosis directly proportional to the amount of hospital space devoted to the care of advanced cases." As Dr. Farrand says: "This simply means that as often as you take a case of tuberculosis and put it under such conditions that it no longer becomes an infecting center you reduce the amount of tuberculosis in a community." "If this be sound reasoning, it would appear that in institutional care of consumptives there lies the principal means of preventing the disease."

It is not my intention to consider at great length the socioligical problem presented by these advanced cases, but there are just a few points to which your attention should be called. By reason of the progressive nature of the malady the earning capacity of the patient is progressively lessened. This means the lessening of the funds available for procuring both the necessities of

life and the means of combating the infection. Lack of money forces him to move from house to house; to poorer and poorer and poorer quarters; to poorer and more inadequate food; to surroundings progressively worse sanitarially, till, excluded everywhere else, he dies in poverty.

Who amoung you have not seen the miserable, dirty, ill-ventilated, filthily-kept room of the chronic poor tubercular? Very often instead of isolation he sleeps in a room with several others—grown-ups and children; often forced even to share his bed with others considered non-tubercular. This condition of affairs is bad not only for the tubercular patient himself but it is a great menace for the family. These advanced cases are as I have said, either 1. Partially or completely bedridden, or 2. partly ambulatory. The first group of these cases constitute the most dangerous source of infection to the family and the house and create the socalled "tubercular domicile." However, the second group, the ambulatory moderately advanced cases, constitute the greatest danger to the greatest number. These ambulatory cases are the ones that we see on our street cars; that walk our sidewalks; use our public drinking cups; frequent the corridors of our public buildings, at all times expectorating profusely and promiscuously. It would seem that having been trained ourselves we could train others to avoid these people; but I ask you, can we? Do we always know the particular spot upon which such person has expectorated? Can we always foresee the cup he will use? Can we avoid the little droplets of his spittle when he coughs from spattering against our faces? He is not only a fertile source of infection for the non-tubercular but he is even a source of infection for the tubercular that have been cured.

It is true that we try to train our incipient cases so that they may be able to avoid re-infection and to teach others to avoid infection. But is it always possible to do these things? We might as well think of controlling the course of the clouds as to think we can in all instances control our tubercular patients, unless we have them under our direct supervision. This class of cases should undoubtedly be placed under hospital regime, and when once admitted they should be permanently detained, forcibly if necessary. We detain our insane to prevent danger to other people's person and property, and it is as eminently proper to detain so dangerous an individual as this consumptive. While I regret to say it he is usually ignorant, careless, indifferent, selfish, and even if told the danger seldom cares.

To quote the figures of Dr. Jordan, the efficient health officer of this city, "Tuberculosis is killing two and a half times as many people in this State as is typhoid fever scarlet fever, diphtheria, small-pox, measles, and whooping cough combined." We have laws requiring the reporting and registration of of these diseases, and in many of them quarintine laws are provided. We have places of isolation and segregation of people suffering with these diseases. Yet for the people suffering with a malady that kills just two and a half times more people than all these other diseases we have no place of isolation, no quarantine, no registration. The more virulent the type in an epidemic of diphtheria, smallpox, scarlet fever, the more strenuous are our efforts; the more closely we watch, the stricter the isolation and the greater are our efforts at preventing spread. On the other hand, when our case of tuberculosis has advanced to what we might justly term the virulent stage—that is, the advanced stage, we have absolutely no provision made for him; no machinery whereby we can handle him; no authority to quarantine or isolate him; no legal method of preventing him from infecting others. As we get strict in all our other dlseases we get lax in our tuberculosis as the type is worse. It is only by isolation and segregation that we have stamped out yellow fever and bubonic plague, and I say to you, it is only by strict isolation and strict segregation, forcibly if necessary, that we are going to handle our tubercular condition.

Understand me, I am in full sympathy with the educational methods that have been and are still being carried out in this fight against tuberculosis, for I am satisfied that without this educational method preceding and the emphasis it has given to the fact that this disease is curable, we would not be able to do anything with our advanced cases; neither would we be able to get them to go to hospitals. But I do believe that the time has come when we should take up the matter of the advanced cases and provide for them.

Dr. Lawrence T. Flick, in the fifth annual report of the Henry Phipps Institute, (Page 58 and 59), in treating upon the subject of dispensaries and senatoria says in part: "Severe restraint of the movements and activities of persons in the early stage of tuberculosis is unwarranted. Such cases are unsually non-contageous. and when they are contageous can be made non-contageous by intelligent treatment. To deprive such people of the opportunity of making a living or of pursuing happiness is unnecesarily cruel and can find no justification in scientific knowledge. With every

advanced case of tuberculosis humanely isolated early cases might be safely disregarded without in the slightest degree interfereiug with a successful campaign against tuberculosis. Our love of humanity demands that we take care of these advanced and dying cases of tuberculosis. Even if we can't look at it from a humane standpoint: monetary considerations would make us do it." This mind you from Dr. Flick.

To quote again from Dr. Jordan: "We are told that in North Carolina we have 3,605 deaths from tuberculosis each year; have 845 fatherless haves from tuberculosis; we have 1,205 motherless homes from tuberculosis; we have 335 homes in which there is neither parent; we have 1,420 orphans." This, I think, is a very conservative estimate. Dr. Jordan goes further and shows these deaths reckoned in dollars. He shows in his compution that all this tuberculosis costs our fair State of North Carolina over five and a half million dollars annually.

In considering the infective ability of the advanced patient in his various stages of ambulation, partial confinement and complete confinement, we have to consider, first, in the ambulatory stage his family, co-workers and casual acquaintances; in the second stage of partial confinement his family and his friends have to be considered; in his third stage of absolute confinement we have to consider his family and especially any subsequent inhabitants of these premises, because, unfortunately, we have in North Carolina no law requiring rigid disinfection of "Price's Tuberculasis Domicile."

It is not necessary to take up these divisions and discuss them minutely. I have already touched upon them generally and I think we all fully realize the great infectiousness of the advanced cases as compared with the relatively non-infectiousness of the incipient cases.

The effects of senatoria for advanced cases are, to say the least, manifold. There is the probability of a complete cure or of an economic cure of the tubercular process, and by this cure the restoration of earning ability. The restoration of earning ability in itself will mean greater ability to fight the infection. In addition to this, even if we do not cure our patient we have to consider the removal of the patient from a productive soil. This removal will at least inhabit his tubercular process and grant him a longer lease of life. In considering this aspect of it there naturally arises the thought that in removing him we are removing an individual that is dangerous; that in isolating him and training him we are lessening the infectiousness of this person, we are removing from his famliy a burden that his hard to bear; a burden that requires constant care; constant nursing; a burden that requires efforts strained at all times and at all poinis to take care of him and keep him comfortable. On the other hand, we are guaranteeing to the family a longer lease of life. And finally, the point to be considered in the effect of sanatoria for advanced cases is the educational influence it will have on the communiiy. A citation from Knopf anent the objections raised by some communities against the location of such institutions in their midst, most aptly illustrates their great educational value: "A properly conducted sanatoria is not a menace to locality but indeed it is a blessing. In the German village of Goebersdorf and Faulkenstein where sanatoria for consumptives have been in operation for more than 30 years, the mortality from tuberculosis has actually decreased one third among the inhabitants of these two towns since the establishment of the institutions. This reduction is explained by the conscious or unconscious imitation of the villagers in the cleanly ways and sanitary precautions practiced in their midst by the lustitutions." This has been verified by local sanatoria in many of our American towns.

It is irrefutable that in the end greater results will be achieved along this line from institutional treatment than would ever result from home efforts. Aside from the effect that sanatoria for advanced cases may have on the individual case itself, must be considered the effect it will have upon the general tubercular death rate. The great object of our campaign has been and is the continual lowering of the death rate attending tuberculosis until it is completely stamped out.

I have already cited you extraets from Dr. Newsholme to the effect that the lowering of the death rate was directly proportional to the care of advanced cases. I ask your pardon for the repetition and want to insert just here with the opinion of Newsholme that of Koch, of Germany. Upon being asked what they thought most responsible for the great reduction of tuberculosis in England and Germany in the last fifty years, gave the following as their opinion:

"The hospital for advanced cases was the greatest single factor." The instances are many where it has been shown that it is undoubtedly the greatest factor in reducting tuberculosis.

Dr. King of the Loomis Sanatorium, in considering the 25 years since Dr. Trudeau established his first Sanatorium at Saranac Lake' draws three lessons from it. In the first lesson he says: "We have learned, and chiefly through sanatorial experience,

that in the early stages pulmonary tuberculosis is curable. This does not by any means mean all cases are curable, for experience teaches us that from the start, and despite every effort, a certain proportion of infected individuals will die; but we have learned that proper care and environment, combined with suitable treatment, will effect a cure in the greater majority." Understand, he is speaking of incipient cases. He goes on to say: "In the second place the sanatorial experience has taught us what is even more gratifying, that advanced cases of the disease in numberless instances are susceptible to such complete and permanent arrest that not only the lives of such individuals may be indefinitely prolonged but in a considerable measure the economic value to the community may be restored. "To one who recalls the old and helpless attitude with which until a few years ago the consumptive with an advanced lesion was regarded, the possibilities which the sanatorium of today offers to just such cases seems the most conspicuous and satisfactory among achievements. It is gratifying to be able to bring about a complete arrest or an economic cure in a case which is brought to us with an advanced and extensive progress."

It is almost wholly through the work and experience of the sanatoria for advanced cases that this note of optimism has entered into our conception of progress in these advanced cases. As we are at present curing and training our incipient cases in our State institutions, as Dr. Brooks is today doing with these early cases at Montrose, so I would have you do all over state with the late cases. There has undoubtedly been a great deal of criticism, and it has been heard even from medical men, of the sanatoria for the advanced cases. It has been claimed that it is a waste of money to bother with the hopelessly ill; that our money should be expended in institutions for those who could again be made well; that could be made bread-earners and useful citizens. I do not know how this criticism could be better answered than to use the words of Dr. Knopf. He has to say regarding the utilitarian point of view of this problem: "One who has had any experience at all with tuberculosis, as a physician or as a social worker, will know that the consumptive, no matter what stage of the disease, if he is uncared-for, constitutes a great menace to his workshop and his home; but unfortunately even when he is trained in the prevention of the disease, particularly in the careful disposal of his sputum during the so-called dry cough, at night when he sleeps he will cough and expell his small drops of saliva containing the tuberculosis germs. These tuberculosis droplets are at times even more dangerous than the dry pulverized sputum, for in the moist state the bacilli retain their virulence, while in the dry state the virulence of the germ is comparatively lessened. Such a patient, because he is not taken care of at the right time and in the right place costs a great deal more in the end and not infrequently lives are sacrificed throughhis condition and environments." This answers objection from the utilitarian viewpoint. From the humane viewpoint we must acknowledge, as does Dr. Knopf, that the present knowledge of Phthisiology does not enable us as yet to definitely state which case is absolutely curable and which case is absolutely incurable.

Dr. Simon Flexner, in speaking of sanatoria for advanced cases, has to say in part: "England instituted the segregation of consumptives in hospitals as early as 1868, and thus before the discovery of the tubercular bacillus. But not until Villinia had proved by experiments on animals that tuberculosis was a communicle disease. The more general appreciation of the communicability of tuberculosis has grown up since the discovery of the bacillus by Koch in 1882, since which time the methods of preventing infections have been greatly extended and improved and the death rate from tuberculosis has materially diminished; and it is significant that the fall in death rate is found to be going on precisely in those countries and exactly in extent to the provision in which hospital and sanatorial care of tuberculosis has been provided. While in countries where this provision has been neglected the death rate still remains high."

We have not at present any specific sovereign remedy for the cure of tuberculosis, but we do not know that abundant air, good light, wholesome food and good housing will materially assist the body to resist the infection and overcome the disease. And among these, good housing is as important as any of the rest, because good housing and intelligent housing usually means the decreasing of the liability to spread infection and is thus a potent factor in prevention.

To refer again to Dr. Flexner's article, he says: "Let us pause for a moment to examine some of the results already achieved from the segregation of consumptives in sanatoria and hospitals. The country which has led in this respect and which has the longest record is England' for which figures are at hand covering a period of 40 years. During this period from 1867 to 1906 there has taken place a fall in the annual death rate per million living at all ages, from 3,-

350 to 1,610; equivalent to a diminution of nearly 52 per cent. In 1907 in England and Wales tuberculosis was responsible for 10.7 per cent. of the deaths from all causes. Still, in the period of 1850 to 1860 before hospital care of consumptives was introduced the proportion of deaths from tuberculosis was 15.06 per cent of those from all causes.—As striking results as these have been attained in Berlin and the other European centers, and what has been done in England and Germany and in parts of this country can be as well done, or with the result of their experience, be better done in every town and county in our state.

Is there a need for sanatoria for advanced cases in North Carolina? I answer you there is a need, a crying need. Our advanced cases need them, we need them. We need them not only as Dr. Knopf has said, from humanitarian standpoint, but we need them from an economic standpoint. The restoration of the earning ability to the patient; to train these patient, to train these patients that they may train others; to save a useless, unrelated, unsystematic expenditure of funds in trying to take care of these cases under the present conditions. The patient needs this kind of sanatoria because, as I have said, it puts him back on a basis of earning, a self-supporting basis. Further than that, if he is completely cured it not only puts him on a self-supporting basis but it puts him on a basis where he can support others. He helps in the fight by training others, and is ever afterwards one of the most enthusiastic advocates of the tuberculosis propoganda. As it is at present, we have in North Carolina among our poorhouse inmates many cases of advanced tuberculosis. We have among our outside poor many cases of advanced tuberculosis who will sooner or later have to be taken care of by the public, by charitable organizations, or by the County at its poorhouse. There will, undoubtedly, due to the lack of proper sanitary precautions, be many new cases developed from these advanced cases, and here it is seen that the ultimate cost will be greater than were they under institutional care at present. If our general hospitals would receive these cases they early in the disease might have recovered, but the attitude of the general hospital, and justly so I think, is that they do not want consumptives. The more ill he is the less they want him. They do not consider it wise to treat an advanced consumptive in a bed side by side with a lobar anemia. In fact, they do not want him in the same ward. If there happens to be some ward set aside by the general hospital for the consumptive it is usually unattractive, distantly located, unhygienic, unsanitary, and generally shunned as if possessed by the devil himself. This is mainly the reason we have the advanced cases.

In the beginning, my idea was for one large State institution, but the more I have studied this question the more I have become convinced of the utter futility of one institution. For reasons I will cite, it would seem to me, after thoroughly considering it, that the most feasible plan, the one most efficacious, and the most easily instituted, would be for each county or each municipality to furnish its own institution. The reasons are good. Among many of the advanced cases there is an almost absolute inability to travel, should they be willing to go to such an institution. We are increasing their field of infectiousness by sending them on trains and through public conveyance, giving them access to various public conveniences. We are throwing them in contact with a greater number of people, and from the viewpoint of the patient himself we are putting a great tax on his strength; a tax that will be felt at a later period of the disease. The cure of tuberculosis is primarily a fight for conservation, and any fight for conservation cannot be begun too early, nor the patient's strength be too assiduously nursed.

Another reason against the one institution is the reluctance of the family and friends to see the patient go away from home. When he is in the same county or the same town there is a feeling of nearness and a realization of accessibility which will mitigate much in obtaining the consent of the patient and his family and the advice of his friends for institutional confinement. On the other hand, very often the patient would agree to go to a county place or a town place when he would be reluctant to take a journey of a hundred or two hundred miles away from home to a community of whose climate, people and customs he knows little or nothing.

If each community would build its own sanatoria it would be more willing to pay for it. If it can see its advanced consumptive poor taken care of it will be a greater object lesson when the matter is brought home to them daily. They will not feel it so much of a tax as if they have to pay for the support of an institution 100 miles away and feel that they are being unjustly taxed to help take care of some other county's poor. And again, there is just a little bit of human nature in this idea. It is notorious that each individual, each community likes to manage its own affairs without the interference of an outsider. Again, the county or municipal unit as contrasted to the State unit would eliminate any possible evils of a large political institution.

The large central institution is eminently practical for the early cases. The county unit has been the plan of several of our states in providing for the advanced cases, and it means immediate available caring for the advanced cases, and this plan of caring for these cases is rapidly growing. It is shown by the number of hospitals in counties in the following states: New York 11; Ohio 6; Illinois 3; with one in Chicago; Iowa 3; Minnesota 1; Michigan 3. It is very unwise to assocaite in our county almshouses these tubercular patients with the other patients and other inmates, and it would be a small matter to each county home to provide a ward, a wing or a building for the advanced tuburcular of the county and take care of them there, and it would be undoubtedly a great deal cheaper than trying to handle them in any other way.

These hospitals can be maintained at an expense of one dollar a day for each patient. This, I believe, is the estimate of caring for the incipient cases at Montrose. Dr. Knopf estimates that at present in New York out of ten thousand advanced tubercular six thousand would very probably be cured after an institutional stay of 250 days' amounting to a cost of two hundred and fifty dollars. To take Dr. Fisher's estimate of a human life being worth one thousand seven hundred dollars, we can see here the immense saving in dollars, that would acrue. Out of ten thousand Dr. Knopf estimates that six thousand would be saved, which would mean a saving of eleven million dollars, and this saving at a cost of practically three million,—a net saving of over seven and a half million dollars.

I realize that these figures represent an enormous amount of money. I further realize that to put a tubercular hospital in each county will require a great outlay. I can hear now the cry of pauperizing the Staia, but in answer to that cry I would use the words of one of the noted New York workers; that "Even if I am pauperizing the state it is far better than tubercularizing the state."

A Sin of Unbelief.

By J. T. J. Battle, M. D., Greensboro, N. C.

Horace once said that death comes alike to the prince in his palace and the peasant in his hovel. As for the ultimate result, that is an incontrovertible truth, but death does not come so soon to the prince as to the peasant and the reason therefor in easy to find—the palace is hygenic, the hovel is dirty.

One of the great sources for the spread of disease is the fly. Its natural habitat and place of propagation is filth and while it revels in its environment it is a constant and persistent back door caller and takes no hints, but forces itself in every kitchen and dining room, running the gauntlet of screens and other devices. In ancient Egypt these insects were so troublesome that the Egyptians set up a special god to appeal to for riddance of these pestiferous and disease bearing insects, and named him Beelzebub, whom the Jews derisively, but very appropriately dubbed "lord of the dunghill". So when flies are your constant guests, remember Beelzebub is in your backyard and instead of kneeling at his shrine. begging for deliverance, get your shovel and torch, destroy their breeding places and all will be well.

Another item of vital importance which while it does not produce disease directly is largely responsible for depressing the vital power of the system and it is this. Many houses are built too close to the ground. Where this is the case the organic matter in the soil in the presence of moisture is constantly undergoing decomposition and the resulting poisonous gases are as constantly escaping and working their way through the floors and into the rooms, thus not only supplanting the life giving oxygen but is in itself deleterious. This is especially the case in rainy weather as then the windows are closed to keep out the dampness, and the rain, seeping into the ground drives out the gasses into the rooms, so the occupants wake up with headaches, loss of appetite, malaise, etc. The remedy is self evident; build the houses higher from the ground and ventilate underneath.

As this Society is especially concerned in regard to tuberculosis, which disease causes more deaths than war, pestilence, famine and accidents, all combined, I hope it will not be uninteresting to notice the onslaught the bacillus tuberculosis makes upon the system. and the body's attack to repulse it. This conflict is a titanic one. It is a fight to the finish, for a tragedy is to be the result. In the great majority of the cases the human body wins out. The bacillus is well nigh ubiquitous and no doubt every one has had them in their system. When they find a suitable soil for propagation their numbers increase rapidly and death would soon follow but for the heroic efforts of the white blood cell, technically known as leucocyte, or phagocyte. These are of two sizes and combined make an immediate attack upon the enemy the smaller ones actually swallowing

*Read at Raleigh before the recent meeting of the N. C. Association for the Prevention of Tuberculosis.

them, but the bacillus in turn kills its host. The large cells, in the meantime, are marshalling their forces and have formed a line in front of the colony-have executed a successful flank movement and now throw into the intervening spaces the right and left wings of their army. If this manoeuvre is complete the colony is rendered innocuous and the result of this formation is called a tubercle, from which we get the term tuberculosis. In this mortal combat everything depends upon how rapidly and how long the system can produce the white blood cells or leucocytes. The treatment is to put the body in the best possible condition to make these cells and this is done by rest, sunlight, nutritious food, and fresh air twenty-four hours every day. Patent medicines are a delusion and have caused the battle to be lost in many, many cases and benefitted none. Yet in their advertisements. the attractive verbiage and positive promises to cure have caused many credulous readers to invest their hard earned dollars which soon resulted in dire disappointment, leaving them in a more hopeless plight. The religious press cannot be too strongly condemned for carrying columns of advertisements which are absolutely false while reputable secular magazines have discontinued them. Very forfunate for humanity, these bacilli do not propagate outside of the living body and a healthy body can generally overcome them. So it is incumbent for every person to look carefully after his physical condition.

A decayed tooth is by many not seriously considered only when its presence is made known by that pain which needs no description, yet that tooth is a culture tube offering every condition for rapid growth of these bacilli as well as others. When the food is being chewed these germs are mixed with it, carried into the stomach and pass into the circulation by means of the thoracic duct into the left subclavian vein from which it soon empties into the lungs and there finds its too often fertile soil. Or, as is frequenily the case in children, they find their way through the root of the tooth into the lymphatic glands and finally lodge in one or more of the submaxillary glands which sometimes suppurate and the child has what was formerly called scrofula, but is now known to be tubercular. Every child in the public schools of the State should be examined by competent physicians and the parents notified of any defect, abnormality or disease and the State's expenditure of money for schools would bring 25 per cent more in efficiency of educational work.

If the State Board of Medical Examiners had the strong support of the Legislature, the personnel of the medical profession could be improved 50 per cent in a very few years and great improvement in the general health of the people would be the result. In its last analysis health is the true foundation of riches.

It is estimated that 25 per cent. of the discharged convicts from the State's penal institutions are tubercular, and they prove to be foci for the dissemination of tuberculosis in the community in which they live.

Capital properly invested to promote health will yield the largest dividends that money is capable of producing. If our legislators only realized the importance of their responsibility they would lend their aid in a more substantial manner to the State Board of Health, thereby increasing their efficiency and correspondingly therefore the healthfulness of our State. They do not believe it and this constitutes "A Sin of Unbelief."

Report of Case of Tubal Pregnancy.

By J. B. Cranmer, M. D., Wilmington, N. C.

There is, in the mind of man, an element to which the mysteries of life, deeply appeal.

To the average practitioner nothing is more mysterious, nor of deeper interest, than that an ovum may be fertilized and grown on ground foreign to its normal development; therefore, few subjects in the whole range of a man's practice can excite in him a more natural interest than this extraordinary phenomenon, hence, my report of this case.

Mrs. S. G. L., age 34, always healthy. Married, first at age of sixteen. Husband lived three years. Widow for seven years. Married, second time, eight yeas ago.

One child. three years old. Menstruation, "always irregular". For four months previous to present illness, menstruation regular; and perfectly normal. Last menstruation "the week before Christmas". Entirely well, in every particular, until morning of January 22nd. Slept well the night before, ate breakfast as usual, and as it was Sunday, "was dressing for Church", when she was suddenly taken with lancinating and agonizing pain in lower abdomen, which continued for about one hour, followed by faintness, and patient passed rapidly into state of collapse, and was found by me in that condition upon my arrival at the house.

There was no external bleeding, but the extreme anaemia and deathly pallor were significant of hemorrhage.

Having first administered stimulants, and as soon as practicable, I proceeded to make

an examination: abdomen was slightly distended, and generally tender, a little dullness was found, in both flanks; bi-manual examination revealed nothing definite, except that when pressure was made upward upen cervix, patient would flinch and cry with pain; rectal examination was negative. Diagnosis, probable exra-uterine pregnancy, with rupture of tube.

Such cases brook no delay, and I took my patient to James Walker Memorial Hospital, and operated upon her immediately.

A mid-line incision was made, blood and blood clots spurting from abdomen as soon as the peritoneum was incised, completely obscuring the field of operation. Passing the left hand down alongside the uterus. this was pulled up and seized with volcellum forceps. Rapid manipulation and sponging revealed the left tube ruptured and bleeding profusely. The tubal mass was clamped on either side of the tear by forceps, and the hemorrhage having been controlled, and most of the clots removed, the clamps were replaced by ligatures and the foetal sac taken away.

The right ovary and tube were in a normal condition.

A litre or two of normal salt solution was poured into the peritoneal cavity, and the wound closed except for a large cigarette drain, placed well down in the "cul de sac."

In the tubal mass, removed was found a very small product of conception, 4. 2 milli-meters in length.

Patient has made a good recovery, and is rejoicing in the fact that her return to health is due to Tait's discovery in 1883, when he performed the first Laparotomy for checking hemorrhage from ruptured tubal pregnancy.

The interesing phase of this case, to me, lies in the fact that the patient had not gone over a *single minstrual* period, nor had she had *one symptom* of pregnancy.

A Consideration of Sudden Death in Some Medical Conditions.*

By Alexander G. Brown, Jr. A. B. M. D., Professor of Practice of Medicine, University College of Medicine, Physician to the Virginia Hospital, Richmond, Va,

If physicians, and surgeons as well, were more alert to discover in patients those pathological states that are potent with grave possibility of bringing about sudden and unexpected death, less frequent would sudden death occur. Every careful observer apprehends as he reviews the field under consideration that sudden death occurs under many different conditions. But for our purpose we shall divide such cases into four general groups, and then shall cite some specific states in which sudden death may be expected, noting some of the clinical symptoms. Such a grouping is purely one of personal convenience, that might very properly be amended or modified.

First, there is that group of sudden deaths that occur in persons undergoing no medical treatment. The daily newspapers frequently note the sudden and unexpected death of some prominent business man, for instance. Many of these cases are due to causes not at all known at the time. In some of these cases the possibility of such an event may have been discovered. But, in spite of the warning the risk has been taken and the penalty suffered. No discomfort, no impairment of nental vigor, no apprehension of impending harm, these persons under the strain of unusual, or even usual duties, or affected by conditions of eavironment, as heat, climatic states, etc., or poisoned by improper diet, impure food or toxic states suddenly meet death without warning. In the "Summer term" such deaths frequently occur.

Second, sudden death not infrequently occurs from known medical and surgical states while patients are under observation. The knowledge of the possibility of sudden death in some cases is useful. Such information under certain conditions enables the clinician or physician to adopt steps that prevent or at least delay the fatal sudden termination. While in others, the knowledge but gives one the opportunity and duty of warning his patient or his friends of the inevitable event which is foreseen. The recognition of these pathological conditions or the foretelling of such a grave outcome is of significant value both to the patient and to the physicians. Whether preventable or inevitable it is important clinically to be conversant with the possibilities of cases under ones care. For instances in cases of an anuerysm of the aorta, where the tumor indicates serious inroads upon the coats of the artery, one has no other outlook but that of sudden death. How much better for the patient and for the physician it is to have such a condition thoroughly recognized and properly managed. No question about the outcome, exists but may not proper management delay the issue; forewarning at least of friends, save the pain of unexpects death, etc. While our surgeon friends are urging the physician to early recognition of operable conditions, and to bring them early for operation, I would urge the surgeon, now so numerous, to operate with more trepidation in cases beyond the fifty year mark, and to

submit, as duty demands, such cases to the scrutiny of the careful medical man.

In this group we often note sudden death in surgical cases. Some surgeons, I fear do not give such cases careful medical study. Hence while attempting to relieve some surgical condition; some urgent and needful, some not urgently needful, sudden death occurs. As the surgeon becomes more skilful and competent to do surgical work, he becomes more and more incompetent to diagnosticate and interpret obscure medical diseases.

Third, sudden death sometimes occurs in cases under active treatment. Nothing is more lamentable than to have a patient suddenly die when the conditions for which the treatment was instituted was regarded in no manner serious or deadly. The necessity for careful examination before prescribing and the daily investigation of the case is often forced upon clinicians. Consultations often disclose the threatening sudden death, not from the pathologic state alone but also from the manner of treatment: How well do I recall a case of unrecognized syphilitic heart in a respectable woman who died suddenly while using a small dose of acetanilid: a dose that a normal person would have not felt harmfully. Then the use of untried remedies are fraught with the danger of sudden death. The need for a careful and intelligent examination in the use of 606, of the sero-theapy of the new synthetic preparations, is apparent to all. Under this group sudden death is becoming more and more frequent.

Fourth, sudden death som-etimes occurs at an unexpected moment in certain group of diseases as result of new and unexpected complication. Hence in certain diseases look out for complications that produce sudden death. For illustration, in this group may be placed Bright's disease. A person apparently doing very well, with chronic Bright's may suddenly die in a uremic convulsion without warning. In pneumonia during convalescence or after the crisis, acute dilatation of the heart may occur and sudden death ensue. In Diphtheria after two weeks convalescence paralysis of heart nerves may occur and death result.

SUDDEN DEATH IN HEART DISEASES.

Krehl says "The more we study heart disease the more we are impressed with the extreme complexity of its etiology" and he might have added, the more we were cognizant of the uncertainly of its termination. We must dissent however, from the common opinion, as expressed in coroners' and some physicians' reports that the unexpected deaths are always due to heart disease. Fifty years and more ago, Stokes uttered his protest against this common belief. Gibson (Cited in editorial J. A. M. A. Vol XLX No. 5) of Edinburg also gives expression to the same opinion. He says: "We now recognize that sudden death is not of extreme frequency in such (heart) affections. One or two special (heart) diseases are as we know, prone to sudden dissolution, but these form a great exception to the vast mass of cases of heart disease. As we grow older our prognosis in cardiac affections, though it will probably remain for a long time one of the opprobria of practical medicine, becomes without doubt rather more hopeful than when we start out on our life work as physician."

While there is a definite conclusion reached that heart disease does not end so often as formerly believed in sudden death, we must recognize that sudden death quite frequently occurs in certain special heart maladies. Keisch (Munchene Medizinisch Wochenschrift, April 7, L V, No. P P 713-776) who has had opportunity to make postmortem examinations in 156 cases of sudden death in case of heart disease gives the following report: That under age of 30 years persons with heart disease are not more liable to die than others, but between 30 and 50 years sudden death is much more frequent, and that after fifty years those with heart and vessels diseases "face prospect of sudden death". Obsesity and arteriosclerosis, after fifty years is prominent as causes of sudden death. But concensus of opinion is that sudden death in heart disease centers around the aortic opening. Always as a clinical rule it is my practice to regard cardiac lesion about the aorta as as a probable factor in producing sudden and unexpected death. Aortic insufficiency is unquestionable a most serious cardiac lesion. While for years it maybe well compensated by a proper degree of hypertrophy yet when chronicity marks it, when the aortic sufficiency is associated by extensive arteriosclerosis and euarteritis at the root of the aorta in persons beyond 50 years of age sudden death is not infrequent: death may occur from acute dilatation or ocsion of the coronary arteries. What are some of the significant symptoms of serious aortic disease? The clinician can form little estimate of the significance of the lesion by the murmur per se—.He must study the entire clinical picture. The headache, dizziness, flashes of light, feeling of faintness upon change of position, dull aching over precordium; aching in arms, difficul breathing, hallucnations. somnambulism, distressing dreams, suicidal tendencies are some of the subjective features of these cases, and the aortic facies (pale and sal-

low complexion,) sudden and general pulsation in the arteries, (carotids, temporal and branchials), shaking sometimes the upper trunk of the body, later the capillary pulse, markd the aortic cases. Again, the bulging chest (dome-like) and aneurismal-like impulse in 2nd right interspace, and the sytolic thrill felt on palpation, the aortic diastotic murmur, best heard in most cases in second right interspace near sternum are significant findings in such cases However various conditions of blood pressure, condition of aorta and previous adjacent diseases such as pericarditis, pleurisy and mediaslinal tumor, etc. may alter site of maximum intensity of this mummur, etc.

Next, we turn for a brief consideration to another ominous condition in, what we might call, the aortic circle, namely, Angina Pectoris. Aortic insufficieny is not infrequently a concomitant condition and the sudden death may express itself in an anguinal attack. But without apparent coincident aortic disease angina pectoris may cause sudden and unexpected death. Sudden death is frequently the first manifestitation of the condition. Without any previous disturbance or without any discoverable cause as far as the heart it self is concerned, angina pectoris may suddenly produce death. Sudden death may occur in anginal pectoris from occlusion of coronary arteries, by embolus, by thromb, by endarteritis and is-chemia or by interrupted conduction and heart block.

Heberdens clinical summary by Hirshfelder gives us in suitable form the salient features of this cause of sudden death and might be properly used at this point.

1. Sudden attacks of oppression in the chest (Matthew Arnold saying it is "As though there were a mountain upon my chest."

2. Mental anguish, angon animi, with fear of impending death.

3. Intense pain over left precordium and down left arm.

4. Disturbances of sensation. mumbness.

5. Changes in pulse(so-metim-es normal at other times intermissions.)

6. Extreme pallor and constriction of peripheral arteries during an attack.

7, Sudden death.

In associated clinical conditions we should look for sudden death from angina pectoris. In acute dilatation of heart angina pectoria may appear; a condition made possible by the sudden relaxation of the heart muscles. From this clinical fact we must not be unmindful of a dilatation that, showing yet fairly compensatory action may cause an angina pectoris. Also in dilatation or aneurism of the aorta where cardiovascular phenomina seem in no wise essentially indicative of imminent death, sudden death may take place as a result of ischeamic condition, embolism, thrombosis, or motor disturbances in heart muscles.

Attention should be called to Osler's references to early small aneurisms near the sinuses of Valsalva as an exciting factor the production of angina pectoris. Mere pressure of an aneurysm or the distortion of the ascending aortatend to excite angina pectoris which may terminate fatally and unexpectedly.

Patients presenting any of the above clinical conditions entering up the 4th and 5th decade are not free from the possibility of sudden death. Particularly are these persons in danger when further associated with general arteriosclerosis, nephretic, gastro-intestinal disorders, intoxications, tobacco habit, overstrain, (mentally or physically), hyperthyrodism, etc.

Dilatation o fthe aorta is also an interesting factor in the possible production of sudden death and should be recognized at the earliest possible moment. Not that remedial measure may hope to effect a cure, but that the knowledge of the pathologic picture may enable the clinician to formulate rules of management looking to the prolongation of the patient's life and usefulness in modified form at least. In speaking of dilatation, I use the broad meaning of the term as expressed by Hodgson in 1815, who spoke of it as "a preternatural permanent enlargment of the cavity of the artery." Such a condition follows aortitis and secondary dilatation and of dilatation of various shapes may obtain; it be spindle, spheroid, pyriform or a flabby bag. There may also be aortic insufficiency, disease of coronary arteries, or associated myocarditis. This condition is more common than popularly considered. It is usually seen in elderly persons, not infrequently associated with some previous infectious disease and particularly syphilis. Its definite physical signs, aside from the usual heart symptoms, are visible pulsations in the upper interspaces, dulness over the upper sternum and adjoining insterspaces; and certain pressure signs; brassy voices, X-ray showing enlarged vessel and heart. The most probable cause of sudden death in such cases are angiua pectoris, acute dilatation of heart, rupture of aortic leaflet, and rupture of aorta itself.

SUDDEN DEATH IN PREGNANCY AND LABOR.

I know of no more unfortunate fatality than sudden and unlooked for death during

pregnancy, parturition or peurperum. Usually the heart, when suffering from some more or less serious impairment challenges the admiration of the clinician as it affords compensatory circulation under such trying conditions. Every physician recalls cases showing splendid work of a crippled heart in pregnancy and labor; and some passing scathelessly through repeated pregnances. While this is true yet we know that in some cases sudden death occurs in pregnancy, parturition or peurperum. In cases of pregnancy with aortic diastolic murmur the attending physician should be on the look out for serious and sudden collapse from heart failure. Such labors should be managed with very little strain upon the muscular system. Chloroform in such cases is essential. Mackenzie says there is not the slightest risk in the use of chloroform in such cases.

SUDDEN DEATH IN KIDNEY DISEASES.

Bronardel insist that more people die suddenly as a result of the complications of kidney disease than from heart disease: whether or not this statement is accurate, we, as clinicians know, that sudden termination of life frequently occurs with nephritics from various causes of which the heart itself plays no inconspicuous part. Let us for reasons of illustration take that large group of nephritics suffering from chronic ureamia. Cases of chronic parenchymatous and chronic interstitial nephritis, that are ambulatory, doing their ordinary work, but laboring under the toxic effect of an indeterminate, but certainly definite products of peverted, tissue metabolism form a large proportion of cases of sudden death. We must remember the clinical rule that in such cases coma and convulsions threaten: in parenchymatous there is a tendency to convulsive termination; in interstitial, to coma. Either of the ureamic states may appear suddenly and, in some cases unexpectedly, terminating in rapid death. But, generally as one reflects upon ones case histories, sufficient and ample warnings of the grave catastrophe are usually present. They may be often, wanting in apparently grave symptoms in one moment, however, in the next they may be seized with a most intractable and fatal syndrome; showing a paucity of admonishing symptoms, and a celerity of symptoms of dissolution. But generally if the findings of a careful clinician receive a proper interpretation there will be observed in such cases symptoms significant of the serious uraemic intoxication which call to mind the grave possibilities. Hence, in the persistent high arterial tension, (sometimes an important agent in the maintenance of forced elmination, not to be too rapidly or hastily interferred with or lower); in various dyspnoas and irregular breathing in sleep; in transient blindness, in slowly but suddenly appearing impairment of vision; in persistent dizziness; in headaches; (a most significant signal of danger), in perversions of mentality; in aphasia; in cardiac enlargement and insufficiencies in vomiting and diarrhea; in cutaneous affections; in insomnia, etc;—in all these clinical symptoms we find reasons for suspecting the sudden death. Of course nephritics die suddenly from other causes; apoplexy, heart failure, and infectious diseases.

SUDDEN DEATH IN STATUS LYMPHATOCUS.

This i sa conditions which occurs in child hood and young persons and is characterized by hyperplasia of the lymphatic glands and lymph tissues, the spleen, the thymus gland and the lymphoid bone marrow. Its diagnosis or recognition is not very easy. Be suspicious of it in enlargement of the superficial lymphatic glands, hypertrophy of the tonsil, swelling of the thyroid, enlargement of mesenteric glands. Sudden death occurs in this condition from unexpected and apparently inadequate causes:—sometimes upon exertion; sometime in use of antidiptheertic toxin; sometimesa anesthesia, trifling operations, and convalescences.

1135 West Franklin, St.

The State's Duty to Its Tuberculous Sick.

By Richard H. Lewis, M. D., Raleigh, N. C.

Members of the Association for the Prevention of Tuberculosis, Ladies and Gentlemen:

During the past year according to the mortuary statistics of a population in round numbers of 400,000 resining in 60 cities and towns of over 1000 population, collected under the vital statistics act enacted by the General Assembly of 1909, there were 721 deaths from tuberculosis 358 white and 363 colored—⅛ of the total deaths. Basing an estimate on these figures applying the same rate to the whole state there were 3600 deaths from tuberculosis in North Carolina during the year 1910. As tuberculosis is much more prevalent between the ages of 20 and 40 than during the years preceding and following that period and as it is generally agreed that the proportion of sick to deaths is about 3 to 1, it is apparent that the loss to the state in actual lives and in the inefficiency of those afflicted with the

*Read before the Raleigh meeting North Carolina Tuberculosis Association, Jan, 31, 1911,

disease is something enormous;—to say nothing of the humanitarian aspect of the matter; so if it be the duty of a state, and surely it cannot have a higher duty—to protect its citizens from disease and death, there is no phase of the public health problem which makes so strong an appeal.

If I were to adhere strictly to my subject I would have to confine myself to the care of the disease, but I know of no situation in which the aphorism "an ounce of prevention is worth a pound of cure" applies with greater force than in the management of tuberculosis. Inasmuch as it never originates *de nevo*, but is always caused by infection with a specific germ derived directly, or indirectly, from another case it is an infectious or communicable and therefore, preventable disease. While it is a comfort to know that it is curable and that under the most approved treatment or management, as in sanatoria, something like 50% recover, or at least secure an arrest of the disease, comparatively very few obtain this enlightened treatment in the conditions as they actually are with us today, and I hardly think it an exaggeration to say that between 80 and 90% of those in whom tuberculosis has manifestly secured a foot-hold die therefrom. So in the management of this great problem, prevention is far more important than cure.

In discussing the question I shall consider it first in its relation to cure—the State's duty to those afflicted with tuberculosis; and, secondly, more from the point of view of prevention and its relation to the public health problem as a whole. I shall also consider it not only in its relation to the central state government, what we usually mean by the State, but also to those subsidiary elements of the State government known as municipalities, counties, cities and towns.

Among the agencies that can be employed for the cure are: 1. The family physician. To all intents and purposes this is the only agency at present at work in our state for the cure of tuberculosis, for the number treated in sanatoria public and private in proportion to the whole number of cases is so small as to be almost negligible. It is therefore the duty of the State to see to it that the physicians it licenses to practice are thoroughly trained and qualified, for on the making of an early diagnosis—not always easy to the most skilful—and the prompt treatment in the incipient stage, hangs in most instances the fate of the patient.

2. The establishment in cities and towns large enough to bear the expense of free dispensaries, with a district nurse attached for looking after the poor tuberculous.

3. The provision by the counties in the form of a colony on the grounds of the county home, or in its immediate vicinity, not too near the home proper but near enough to be under the management of the keeper of that institution in order to save expense—of tuberculosis camps—really small, simple sanatoria for the treatment of such as hold out hope of recovery, but particularly for the segregation of those in the last stages of the disease during which period the danger of their infecting others is greatest.

Finally, the establishment and support by the State of one or more sanatoria sufficient in capacity to meet the demands, up to date in construction and equipment, well manned and liberally supported, in which the tuberculous can be treated *secundem artem*. The above are some of the things the State should do.

As I think upon what I have just read I am reminded of fairy tales, iridescent dreams and such like, for the attainment of such things in the present condition of public opinion is scarcely less difficult than stealing golden apples from the garden of the Hesperides. But we have made a beginning in our State sanatorium which is ideally located on a commanding pine clad sand hill in Quwhiffle township, Cumberland county, but which is as yet incomplete and sadly in need, although the possibilities are great. So far as I am informed only two attempts at city dispensaries have been made, one of which has been discontinued, leaving one recently established, in existence.

With our overdrawn treasury and the number of urgent demands upon it, as a practical man, I realize that we cannot in reason expect state aid for this aspect of the problem beyond such increase of the appropriation to the sanatorium as simple business sense calls for as plainly necessary. So much for this phase of our subject.

Let us now consider the State's duty from the point of view of prevention, which really is the principal object sought to be attained in the anti-tuberculosis campaign, and in the pursuit of which much can be done to promote cures also.

Laws, rules, regulations, are all comparatively worthless unless supported by public opinion, so the solution of the problem may be summed up in one word—*education*—education is sanitation and hygiene. You will note that I say sanitation and hygiene. In the battle of life, just as in actual warfare, there are two great forces brought into action—offensive and defensive. Sanitation may be compared to the

former and hygiene to the latter. In sanitation we wage an active crusade against the germs of disease, we burn them with fire, we poison them with antiseptics, we demolish their strongholds of filth, and in every way actively pursue them to their death. In hygiene we strengthen our fortifications and look after the well being and equipment of the garrison, so that we can resist almost any attack. The human system is supplied with these defensive forces known as the power of resistance or immunity, and by obedience to the rules of hygiene—of right living—they insure us against many attacks of disease and against none more conspicuously than tuberculosis —so that the question of prevention of tuberculosis includes not only the prevention of infection but attention to the general health, and it is therefore largely bound up in the greater question of the public health as a whole. At the same time; while the general rules applying to all communicable diseases apply to tuberculosis, it has such definite and positive features that it demands and deserves special attention in the educational crusade.

The sanatorium can be, and should be, made the most powerful and effective agency in teaching the people, both as regards prevention and cure. When we remember that we have in round numbers 10,000 cases of tuberculosis in the State we see above how inadequate an institution of such capacity as the State can afford must be as a curative agency, where the patients remain on an average. six months. But conducted as a traing school, allowing the patients or pupils, to remain not longer than one month, six times as many could be reached and a larger number of cures would probably result than from the treatment of the smaller number in the sanatorium. The modern treatment of tuberculosis is scarcely at all medicinal but is a mode of life, which may be summed up in—fresh air, good food, rest and self-discipline, to which should be added the cultivation of a cheerful and hopeful spirit. Returning to their homes thoroughly instructed, the pupils would know, not only how to take care of themselves but would also know how to avoid infecting members of their own families and other associates. By this method with a sanatorium or training school accommodating one hundred at a time, an object lesson, anfocus of instruction, could be established in over a thousand homes every year and great numbers now doomed, saved from infection. In consequence of a paper on our own sanatorium read at the meeting of this association at Charlotte two years ago the Board of Directors of that institution has established at training school department and did me the great honor of giving it my name. With sufficient accommodations, thorough equipment, liberal support and good management, public addresses and an active correspondence on the part of the superintendent securing the endorsement and support of the medical profession of the State, the possibilities of this institution in the crusade against our most deadly disease are immense. It should be a light house set upon a hill sending its enlightening rays over our State.

Much can be done of course in the way of education in hygiene and sanitation by the wide distribution of printed matter in the form of newspaper articles, bulletins, etc. For the next generation by the instruction of the children in the public schools, training them up in the way they should go. This plan has already been inaugurated by our progressive superintendent of public instruction with the colloboration of the able secretary of our state board of health, who has prepared a series of excellent short "health talks" with which the teacher is expected to open the exercises of each day.

Anti-tuberculosis societies, health leagues women's clubs and cognate organizations can accomplish much in the dissemination of sanitary knowledge. But they must be organized, and they must be taught, that they may be able to teach others. There is nothing like the personal touch, and what is needed more than anything else is our warfare against disease—not only tuberculosis but all kinds of disease—is what by analogy I call "health evangelists"—a method of campaign that I have been earnestly advocating since 1902. By "health evangelist" I do not mean one who makes only sparadic talks to the people but one who devotes his whole time to the work, not only addressing popular audiences but medical societies, boards of aldermen, of county commissioners, women's clubs, etc. He should likewise promote the formation of such health organizations as I have mentioned and instruct them as to their work. While tuberculosis is the largest it is not "the only pebble on the beach"—there are others, as, for example, typhoid fever, smallpox, hookworm and the other communicable and preventable diseases. Therefore he should inquire into the enforcement of the health laws in every community he visits and report to the central office. In my judgment nothing would so promote the cause of the public health, not only in its relation to tuberculosis but in general, as the addition to the working force of the board of health of such men.

No discussion of tuberculosis in the South that leaves out the negro would be complete.

They are peculiarly susceptible to tuberculosis and the death rate among them from that disease as compared with the white race is as about 2 1-2 to 1. While the colored population is only one third of the whole our statistics show that the number of deaths from consumption among them last year was actually larger than among the whites. I pave understood that they were thinking of asking an appropriation by the General Afsembly of $10,000 to establish a sanatorium for their race. I do not think this would be wise. What they need above all things is instruction in health principles and practices of all kinds in regard to tuberculosis in particular. They pay their taxes which, while small in proportion to that paid by the whites, in the aggregate amounts to considerable and we owe it to them as a just debt to do something especially for them. We owe it to ourselves that we should do this, for coming in close contact with our families as nurses, housemaids and cooks—when we can get them—they are a constant menace to us. Five thousand dollars would pay the salaries and traveling expenses of two colored health evangelists, and I know among them men of intelligence and character who could and would do this work under the control and direction of the state board of health faithfully and well. I do not believe that a wiser expenditure of the same amount of money just at this time could be made.

My successor as secretary of the board of health, Dr. Rankin, in the eighteen months he has been in office, with his inspiring enthusiasm, untiring energy and single hearted devotion to the cause, has done most admirable work for the public health. In him and his assistants. including the director of the laboratory of hygiene, who are in the same class with him, the State is most fortunate in having at the front in her fight against disease and death a force of unusual quality. But they are like the thin grey line of the last days of the war. They need re-enforcements, rations, guns and ammunition. While, perhaps, as president of this special organization, I might be expected to take a narrower view, I think I have shown that the tuberculosis problem is bound up in, and is only a part. though a most important part, of the general public health work. So the best way to fight the "great white glague" is to finish the sanitorium and give it sufficient support, and to strengthen and increase the resources of the state board of health.

It is earnestly hoped that the General Assembly will increase its appropriation to not a cent less than the $25.000 that will be asked, as recommended by the Governor, with an appropriotion of $5000 in addition for special work among the negroes. And I am sure if they will give the matter serious thought, if they will realize, what is the fact, that the cutting off of even a few thousand would mean the death probably, of hundreds of people whose lives could have been saved, of whose money they are the custodians, and that the responsibility for these death would be theirs, I am satisfied the appropriation would be voted without hesitation. It is a grave responsibility and I believe it will be met.

We are in the beginning of what in the years to come will be known as the sanitary age. The movement is world wide. It is rapidly acquiring momentum in our State. Let all who have at heart the welfare, prosperity and happiness of our people aid this great movement.

The Home Treatment of Tuberculosis.*

By J. M. McGehee, M. D., Reidsville, N. C.

I have selected this subject because of the vast munber of consumptives that have to be treated at home. The reasons are many and frequently unavoidable. I might say that majority of people afflicted with this diseases are unable to leave their families and work, on account of that very serious question, money. It is far better to get your patient away from home, by so doing you take him from his business and he is relieved in body and mind of his daily affairs, and is willing to donate his whole time and attention in obeying the instructions given by the physician.

The most important method of our treatment should sonsist in the preventionof the disease. How may we do this? For though those many years the laity and the physician have been slow to recognize the importance of separating the afflicted from the well and to see that the sputum is properly collected and burned. The mortality from consumption is high and we seem to think that when we bury the dead, we also bury all the tubercle-baccilli in the body as well as well as out of the body. Until very recently we have been negligent in seeing that all houses should be fumigated, and many times we have had a number of tubercular cases contracted in this way.

I am glad to say that we realize more than ever the importance of prevention and only recently through the influence of Dr. S. B. Ellington, County Physician of Rockingham, we have taken an advanced step. In the County of Rockingham we have a law that requires all factories, cotton mills

*Rerd before the Raleigh meeting of the N. C. Tuberculosis Association, Jan 31, 1911.

and public places to provide spit cups and these cups must be changed as often as twice a week. Furthermore we have a law requiring all houses to be fumigated after being occupied by a tubercular patient.

If this assembly could only impress this matter upon our legislature and get them to enact a state law requiring spit cups in all public places and the fumigation of all infected houses, then we could go home and feel that our days work had not been spent in vain,

Treatment. There have been many drugs that have been offered as a cure for tuberculosis, but as yet we have no specific and until science has found one we must treat this diseases symptomatically. It is our duty to examine our patients carefully so as to be able to make an early diagnosis. As soon as a diagnosis is made we should tell the patient and it is the duty of the physician to put the question plainly before him, do you want to get well? If so you must follow my instructions to the letter. An unwilling patient is worse than no patient and without his help we can avail nothing. As I have said the treatment is sympathetic.

Temperatue. If the temperature is above normal, rest is indicated and will have a better effect than the coal tar derivatives and similar acting drugs. It may be wise to sponge the body with diluted alcohol or tepid water.

Heart. A rapid heart also demands res and will do more good than digitalis, strophanthus and strychnine.

Stomach and Intestines. The digestion and appetite is frequently poor, dyspepsia is a frequent symptom, and should demand an appropriate diet, tonics and digestive agents. The tuberculor patient nearly always come to you complaining of being tired, weak, no appetite, poor digestion, cough, possibly a slight hemorrhage, fever in the evening and loss of flesh, all of which is very suggestive and usually sufficient to to make a diagnosis. Of course you should examine him carefully. The general treatment of tuberculor patients consists in relieving the symptoms. He should have a bright sunny room, windows lowered day and nigh , in bed or an easy reclining chair, while he has a temyerature over a half a degree or while his heart action is weak and rapid.

Drugs are of limited value, but I believe where we have a lung breaking down, mercury and Ki in Tr gentian compound is indicated. It seems to hasten the breaking down of diseased tissue, liquids it and puts it in a state that is easily expectorated. We have learned long ago from the surgeon that it is necessary to drain a pus cavity before we can expect healing.

Diet. On account of the drain on the system and the marked emaciation it is necessary to give a liberal diet especially rich in fats and proteids. I prefer a mixed diet, consisting of rich sweet milk, raw, soft boiled or porched eggs, rare steak, chicken, fish, potatoes and thoroughly cooked bread.

Exercises. As soon as the strength of the patient will permit they should be allowed to take exercise in moderation, never to the extent of fatigue and always noticing effect on temperature and pulse.

Tuberculin. There are some who laud tuberculin while others condemn it. Personally I haven't had any experience with it.

Frequently we have patients that don't improve and seem to go from bad to worse and the sooner we let them die the greater will be our reward-in heaven. On the contrary there are a great many cases of incipient tuberculosis that get well without any treatment, many others that will get well without any treatment, many others that will get well under proper treatment. The chronic fibroid cases will improve but never recover.

Tuberculosis a Curable and Preventable Disease.

By J. E. Brooks. M. D. Montrose, N. C., Supt. of the North Carolina Sanitorium for the Treatment of Tuberculosis.

Over twenty-five hundred years ago Hippocrates, the law giver of medicine, announced to the world that all persons suffering from tuberculosis were doomed to die. This statement was accepted by the world, and even to the present time is considered true by a vast majority of the people. Even the medical profession as a body has subscribed to this conclusion. The conclusion is wrong. Hippocrates drew his conclusions from the advanced cases which came under his observation. Insipient and moderately advanced stages of tuberculosis neither he nor his fellows recognized. Therefore, in a manner, Hippocrates was correct in his statements, because even today consumptives in the last stages do not recover. These cases are fatal have always been fatal, and ever will be. As a matter of fact, tuberculosis is one of the most curable of all chronic diseases. Even without medical aid, it is a known fact that more persons recover, than die, of this malady. When the world and the medical profession

*Address by Dr, J, E, Brooks, Superintendent of The North Carolina Sanitorium for the Treatment of Tuberculosis, delivered in Raleigh before the Anti Tuberculosis Association, Jan, 31, 1911,

are convinced of this fact many thousands of lives will be saved annually that go to premature graves. Osler, the law giver of medicine of today, and as great in his day as Hippocrates was in his, declares that, although the ultimate eradication of tuberculosis is probelmatical, it is within our power to make it an uncommon disease. As it is, the poor victim is abandoned to his fate, by the physicians, or worse still, is given paleative drugs to smooth his downward path, and to keep him in ignorance of his true condition. Fortunately, however, the recent growth of knowledge concerning tuberculosis has stirred the very heart of the world, and is resulting in changing not only the view of the laiety, but the profession as well.

The fact that it is known and is being taught, that tuberculosis is infectious, that it spreads from the person that is affected with it to the one that is not affected, that it goes through whole families, that one person may infect a whole neighborhood, is stirring up communities to the extent that they are seized with a morbid fear, and the poor consumptive is treated as a person unclean, and is even subjected to the greatest hardships and humiliations. He can go to any hotel, register and get lodging and meals if he does not label himself a consumptive, even though he be tottering toward the grave; while, on the other hand, if he announces that his case has been diagnosed as tuberculosis, even though he be in the early stages, when he would not communicate it to any one else, he is often refused accommodation, and told that they have no place for persons afflicted with that disease. This state of unreasonable panic and fear seems to make people lose all sense of propriety in their absurb notions about its contagion. Formerly, there stood out here and there in the history of medicine, men who held out hope for these poor sufferers, but they were shunned by their brethren, and finally ridiculed into contempt. Today, there are thousands of good men in the profession who know and teach that tuberculosis is both curable and preventable. Still, in spite of this fact, the medical profession, and the laiety as well, are yet in a state of skepticism and unbelief. Thousands upon thousands of lives are sacrificed every year because of this ignorance. What then must be done? What obligations fall upon those of us who declare that this is a preventable and curable disease? The first thing is a campaign of thorough education which will enlighten the public as to the exact nature of the disease, its prevention, its infection, its management, and its cure. How can this education be brought about?

First: It should be taught that it is a curable disease in the early and moderately advanced stages.

Second: That it is a preventable disease, and how to prevent it. The public ought to know that if the consumptive is sanitary, and if all of the sputum is immediately destroyed, that there will be no further spread of the disease; that the patient should be diagnosed early, told exactly the nature of his trouble, and sent to a place where he can be thoroughly instructed in methods of cure, sanitation, and prevention. The curative methods should start in the sanatorium. The sanatorium is the school where the patient can get the necessary instruction and can be taught how to get well. He cannot receive this instruction by going out and listening to a public address on the subject, he has to be put under the care of skilled physicians and attendants, where the LITTLE things that are conducive to health are shown him each day, in order that he may learn by observation and practice, by slow degrees, that it is WITHIN HIM TO GET WELL. The modern treatment of tuberculosis could be sumerized in one wore,—EDUCATION. The patient must be taught how to live, how to keep his body clean, how to destroy his sputum, the necessity of psycological rest, equinimity of body and mind, the value of proper diet, what proper diet is; he should be taught that to gorge himself on twenty raw eggs and a gallon of sweet milk per day is as harmful as any other kind of intemperance, and that the mere fact of getting fat alone is a delusion and a snare. He must be taught the value of right thinking, of sound morals, of proper conduct, and that the possession of substantial character gives the only assurance of permanent recovery from the disease. Finally, he must be taught that the cure IS WITHIN HIM. Living out of doors where the air is pure, and sweet and clean, is necessary. All of these things can be carried out in a modern sanatorium. I suggest that a curriculum constituting a regular graded course with proper text books and daily teachings should be a part of the work of the modern sanatorium. This curriculum should be uniform in all State Institutions. It should be easily and readily understandable by the plainest and simplest folk, and yet it should be so thorough that the patient will not be allowed to go away from the institution without having had every opportunity for his recovery that the skill of the medioal profession of the twentieth century can give. In addition to this, there should be a department where a young man or a young woman who has fallen by the wayside with tuberculosis before finishing his

education can be trained for some occupation that will prepare him for a successful career. Right here I wish to say, that I cannot agree with some of the writers on this subject who claim that two or three weeks is sufficient time to instruct these patients how to get well. The patient comes to you exhausted. He must be put to bed and kept absolutely quiet during a period of from ten days to two weeks, during which time his mind as well as his body, should be given absolute rest, and be burdened as little as possible during this period. After he has gained some strength and is able to be up he can take his daily lessons without interferring with the progress of his recovery. This will take, in the shortest time, from one to six months.

NORTH CAROLINA HAS A HOME FOR HER CONSUMPTIVES.

In the year 1905 this writer presented the matter to the General Assembly of North Carolina, but he found that there was no public sentiment for such an institution. His efforts along that line were renewed in 1907. There was found not enough opposition to kill a bill calling for an extremely small appropriation. The General Assembly of 1907 appropriated the sum of $15,000 for the construction of such an institution, and in addition the sum of $5,000, annual maintenance was appropriated to be available whenever the institution should be ready to open. A site of 950 acres in the Sand Hills among the Long-Leaf Pines in upper Cumberland County was secured, and the construction of buildings begun. The General Assembly of 1909 appropriated $30,000 to continue the work, and increased the annual maintenance and support from $5,000 to $7500. The Institution now possesses 1275 acres of land, many hundreds of acres of which is good farm land. The Sanitorium is a moderm plant, equipped as well as the funds would admit.

For over thirty years the climate of North Carolina has been noted, especially in certain sections of the State, for the treatment of tuberculosis. We believe that there is no sections in the entire world that is superior to the dry, mild, regions in the Sand Hills of the Long-Leaf Pine Belt. Much has been written in regard to climate as a factor in the cure of tuberculosis, some have gone so far as to state it plays no part in the cure of the disease. We deny this. We believe that a dry, well-tempered, pure atmosphere in a moderate altitude is a very important factor in getting results, and that a sandy soil greatly aids in carrying out the out-door treatment. Montrose is completely isolated. In fact, the Sanitorium proper, while on the Rock Fish & Aberdeen Railroad, is a mile distant from the nearest neighbor's home.

Here the patient is taken away from his accustomed surroundings of tumult and noise and worry' where he can renounce his pleasures' give no thought to his business, and live only for his health. Here he is in contact, mentally, physically, and morally with the things that are conducive to rest and recuperation. The scenery is beautiful and diversified, consisting of woodland of a vast area, of a natural park of from twenty to forty miles in all directions, where the beautiful Long-Leaf Pine, the aristocrat of the forest, predominates, so that the landscape retains its green even in the winter months. The climate avoids the extremes of temperature. It is not a burning furnace in summer; neither is it an icy desert in winter. Gentle well-tempered breezes are ever present. It requires almost as many blankets to sleep under in summer as in winter. The number of total and partially sunny days is very great, and altho' we have been keeping climate records but for a few months, and then in winter, we estimate that over 300 days in the year are partially clear. The establishment is supplied with an abundance of pure fresh water obtained from two deep wells, which wells are on top of the plateau. One of these wells is 225 feet, the other is 245 feet deep. Reports from the State Labratory of Hygeine show the water to be pure and excellent.

In regard to the out-door treatment, the patients live practically out of doors all the time. Pavilions are furnished with windows to guard against storms. The food furnished the patients is plain, substantial, nutritious, and plentiful. Fresh vegetables from the garden are furnished during the season. The best proof that the diet is good is the fact that the average gain has been 8 ½ pounds for an average stay of 56 days per patient. Cleanliness is stressed more than any other factor in the treatment. While rest is as important as anything else, it is much easier to get the patient to rest than it is to make him see AT ONCE the absolute importance of perfect sanitation.

The institution has a sewer system of its own in perfect working order; a water power plant which lights the buildings and pumps water; and possesses a fumigating house where the contents of baggage are fumigated both on arrival and departure of the patient. All laundry is fumigated before it is sent to the laundry. In addition, all bed clothing not weshable is fumigated at regular intervals, and floors are mopped daily, during which process a sterilizing solution is used. In the same

manner, all bed frames which are metal are cleansed, using the same solution. This precaution, together with the fact that all the sputum is destroyed in a crematory, and all table ware is sterilized and thoroughly washed, paper napkins being used and cremated, insures the patient who resides here immunity from further infection.

It might be mentioned that our rules are exceedingly simple, but that we consider them necessary; hence. they are mandatory, and patients are instructed that there must be no infringement. Patients rest in bed daily, time depending upon the stage of the disease and temperature range. As the temperature disappears the patient gradually takes exercise under careful under careful observation, and this exercise is gradually incseased so that the patient when he leaves the Institution will be strong instead of weak—he is weakened by ABSOLUTE rest.

We calculate that this Institution, small today, will become large enough to take care of every patient demanding admittance from our State, and we feel that the time is not far distant when we will be forced to provide for hundreds of patients.

In conclusion, let me state that we consider that but a small portion of the real work of the institution is accomplished on the inside of the Institution's territory. We do not expect that every patient will be impressed or heed the teachings which we give him. We expect many to go heedlessly away, as in every other walk of life where opportunity is despised and shunned, and fall by the wayside, and receive little or no benefit from what we have tried to teach him; but we do expect at least fifty per cent to go away cured themselves, and with a message to their fellowmen, and to disseminate this knowledge that they have received here, and to be of great and lasting benefit in destroying the great White Plague.

A final word: We ask and beg of you your co-peration and support. We think we have demonstrated our worthiness of it, There is no need here to waste words in discussing the cruel hardships that have beset this work at every turn in its infancy. Suffice it to say that what has been done has been done in good faith, in tears and in prayers that this Institution might be a star in the crown of our beloved State; and we know that the work will continue to increase in influence, in power for good to the State, and the cause of humanity in general. We have not the slightest doubt, we have never doubted our ability to make this institution one of the greatest of its kind in the entire world.

General Anaethesia by Meaus of X-Rays.

In the New Zealand Medical Journal, after reading the work of Leduc, of Nantes, on the production of general anæsthesia in animals by means of the corrupted electrical current, he was struck with the idea that similar effects might be produced by the x-rays. The tube used was a hard Crooke's, the strength of current in the coil 5-6 amperes, the length of spark 12 inches, and the strength of current in the tube itself 2-3 milliamperes. The following are the Dr's. suggestions with regard to the best positions in which to place the animal: "Draw an imaginay line at right angles to the surface of the anti-kathod; on this line take a point one inch from the surface of the Crookes' tube; place the animal to be anæsthetised so that the imaginary line cuts the back of the skull at the point indicated." Anæsthesia is complete in two to three minutes after the commencement of the exposure, the time varying slightly in different animals. The length of time varies inversely as the strength of the current and the distance of the animal from the tube. Previous to the onset of anæsthesia there is a stage of excitement during which the animal struggles convulsively. The struggles gradually decrease until unconsciousness and complete relaxation are present. The breathing and heart-beats lessen in intensity. Anæsthesia lasts five to seven minutes, during which there is completely insensibility to external stimuli. As the effects pass off the heart commences to beat more strongly and the respirations become deeper. Consciousness gradually returns, the animals stands up, and moves about in a dazed fashion. Finally it runs about as well as ever. There are no after effects, such as nausea, and no apparent impairment of intelligence. The results have been approximately the same in all cases, and no death has occurred. He believes that radium emanations may have a similar effect of inducing anæsthesia in that the gamma-rays of radium are comparable to the x-rays, and resemble the latter in penetrative power. The Dr. is uncertain whether the subject of x-rays anæthesia will ultimately prove of more than academic interest, and would welcome further experiments with a view to elucidating the point. The author is at present investigating the possibiliies of blue light as a producer of anæsthesia.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

BLOOD COUNTS IN DAILY GENERAL PRACTICE.

Considering the ease with which technical skill in the making of hemanalyses can be acquired, and in view of the very great practical importance of a thorough knowledge of the biology of blood, and blood reactions it is a very noticeable fact that this means of diagnosis and prognosis has been very little used in general practice. This is undoubtedly because hematology is still an unknown field of medical endeavor. In fact, it may be said that in no other part of human cytology is there so much said that in no other part of human cytology is there so much misunderstanding, faulty interpretation and absolute indifference. But as the general practitioner is as a rule the product of former teaching we cannot escape the conclusion that his medical educators have neglected their duty. We shall not find fault with the unsettled state of many important questions, for here conservative guiding is indicated, but the dogmatic condemnation of blood counts as of no value, or as confusing in the diagnosis, and management of a disease is to be resented by all lovers of truth. Such statements that "in severe infections usually characterized by hyperleucocytosis one may occasionally find that lenespenia that in typhoid fever there is often a relative lymphocytosis, and, the mentioning of an aleukemic leukemia," go on unchallenged, and are handed daily from master to student. It is with no little regret that we notice one of our foremost clinicians speak in this loose fashion about hemanalysis in general practice. The truth is that leucopenia is otherwise leucocytogenic infections is not well authenticated, that to speak of the usual relative lymphocytosis in typhoid is a totally irrelevant statement, and that aleukemic leukemice is a fine example of a reductio ad absurdum.

A blood count, by that we mean a complete red and white count, with hemaglobin estimation, repeated at intervals of a few hours or a few days, should be made in every case where any infection or any blood disease is to be diagnosed or excluded. But the most important and most difficult part of hematology is the interpretation of a given blood picture. This can be realized only by combining a thorough examination of the patient with the result of one or more hemanalyses. Blood counting as a laboratory procedure, away from the bedside is a waste of time. Hematology as a specialty has no raison debre. The conscientious physician, whether he is consultant, or general practitioner makes his own blood counts, examines his cases personally, and then draws his conclusions from this conjoint inquiry. The relation of facts is one thing and their correlation is another and larger question. Upon serious reflection it seems that hemanalyses will, in the near future form one of the essential aids in the management of such cases as appendicitis, salpingitis, parametritis, typhoid fevers, etc. The function of surgery is essentially the correction of mechanical effects incident to trauma. neosplastic growths, or inflamations. The surgical therapy of infections, wherever located, is based upon the removal of physical obstacles. The indications for surgical intervention (not interference) in abdominal and pelvic infections are very much in need of readjustment, and in this task the general practitioner will find no truer friend than careful, repeated blood analyses.

DOCTORS OF OPTOMETRY.

"There is probably no more striking illustration of cupidity than is furnished by the manufacture and sale of nostrums to the unsuspecting public. Widely advestised, they find their way into the homes of the ignorant and credulous, in a thin guise of philanthropy, since they are proclaimed as cures for all forms of disease. The investigations made in the laboratory of the American Medical Association by the Council on Pharmacy and Chemistry have shown that for the most part they are not only useless but fraudulent; since their chemical composition reveals the fact that they cannot, with any reason, be expected to produce the results claimed for them in advertisements and are therefore an imposition upon the purchasers; the sole purpose of the sale being to secure money without value received.

Closely allied to this nefarious industry, is the more recent incursion made by the so-called "Doctors of Optometry", who advertise to examine eyes free of charge and engage to "supply glasses without the use of drops." These so-called "doctors" are seeking official recognition by the Legislatures of the various States as "Doctors of Optometry." In many of the States this recognition has already been secured through specious claims to the scientific-fitting of the eyes by glasses by making it appear to the layman that there is no necessary relation between the practice of medicine and the selection of glasses for the optical

correction of defects of the eyes.

In point of fact, one of the most important lessons taught by the assiduous cultivation of Ophthalmology as a special branch of medical science has been to show the very important relation which exists between eye strain caused by the optical defects of vision, the anomalies of accommodation and binocular balance and a large group of general nervous disorders, headache and chronic irritation and inflamation of ocular tissues. It is well known by medical men that the first onset of visual disturbance for which the majority of people are prone to seek aid from the use of glasses, is in many cases the forerunner of connecting disease either in the eye itself or as a local manifestation of some general disorder. To ascertain the true state of affairs requires the education and special training of the physician. Among the eye diseases which in their early stages may suggest the need of glasses, because of the accompanying impairment of vision, may be cited for example, the early stages of simple glaucoma, chorioiditis, retinitis optic nerve disease and the transient ocular palsies occuring in the early stages of tabes.

Of visual impairment associated with general disorders, examples may be found in the local manifestations of cardio-vascular disease, of the retinitis of albuminuria, the diseases of the chorioidal tract of the eye due to syphilis and tuberculosis, not to mention the serious affections of the optic nerves due to many forms of intracranial disease. In all of these, early recognition is of signal importance to the patient, since suitable treatment must be instituted during the early stages of these affections if serious and permanent impairment or loss of vision is to be averted. In any or all of these conditions the optician is no better fitted to recognize them or to understand their serious import than the family butcher, baker or candlestick maker.

It not infrequently falls within the experience of the ophthalmic surgeon to be consulted by patients who have for many months been receiving successive pairs of glasses from the optometrist, until the serious loss of vision from advancing disease had finally driven his unsuspecting victim to secure professional advice, when too late to avert disaster. This is especially true of creeping cases of simple glaucoma, simply atrophy of the optic nerves, chorioditis and in blood-vessel diseases all of which are comparatively painless, but nevertheless serious and among the most common causes of blindness.

We believe therefore, that a vigorous educational campaign should be pushed in every community, especially with our Legislators and Governors to prevent the harm which must result to many members of society from this nefarious practice which is, when all is said, simply an outgrowth of commercial cupidity and should be prohibited."

QUARANTINE FOR ACUTE POLIOMYITIS.

Inasmuch as the onset of Acute Spinal Paralysis in children is so sudden and the damaging results of the infection follow so soon, our efforts, in the battle against this dread disease, must be directed along the line of prevention rather than cure.

In the light of our latest and best knowledge this disease is infectious and more or less contagious also. Direct transmission of the infection from the sick to the well frequently occurs, and transmission by means of healthy carriers is possible.

Flexner of New York, to whom we are indebted for some of the best research work in poliomyelitis, says that it is caused by a minute micro-oragamism that has not yet certainly been seen under the microscope, but can be defined and studied as though it were visible. He experimented with the transmission of the disease to monkeys and found that it could be easily transmitted to them and the naso-pharngeal mucous membrane seemed to be the most likely channel of infection and also of dissemination of the disease. If this is also true in the human being as many now believe, then we are justified in securing protection from poliomyelitis infection by employing isolation and other suitable measures.

This has been proven to be the wisest method in some recent epidemics where quarantine was instituted.

In the Nebraska epidemic of 1909, Anderson reports that the number of cases was on the increase until quarantine measures were established, when the epidemic rapidly died out.

Armstrong of St. Paul, Minnesota, reports an epidemic in which quarantine regulations were carried out for two weeks with each case.

The Chicago Department of Health, recognized as one of the most advanced and effective in the country, requires notification of all cases of acute poliomyelitis and enforces a quarantine about the same as for scarlet fever.

The epidemics of this disease are fortunately not numerous as yet but their number and the number of cases seem to be increasing each year.

THE APPROACHING MEETING OF THE NORTH CAROLINA MEDICAL ASSOCIATION.

This meeting will be held in Charlotte on June 20th-22nd. At a recent meeting of

the Mecklenburg County Medical Society, the following physicians were appointed members of the Committee of Arrangements: Dr. E. C. Register, Chairman; Dr. A. M. Whisnant; Dr. A. J. Crowell; Dr. J. R. Alexander, Dr. John R. Irwin; Dr. J. R. H. Davidson.

Dr. J. P. Munroe, President of the North Carolina Medical College, will deliver the address of welcome on the part of the Mecklenburg County Medical Society, and Hon. W. C. Maxwell, City Attorney, will deliver the address of welcome on the part of the city. Dr. G. T. Rowe, will say the invocation.

The next meeting of the North Carolina Medical Association will in all probability be the greatest meeting in the history of this organization. Dr. C. M. Van Poole, the President, and Dr. D. A. Stanton, the Secretary are making every effort they possibly can to make this approaching meeting a great success.

On Tuesday afternoon at five o'clock, the members of the association will be invited to take an automobile ride of one hour. On Wednesday evening from nine to twelve, there will be a general reception at the Manufacturer's Club. The members of the Association and their wives and the ladies and gentlemen of the city will be invited toattend.

The general meeting of the society will be held at the County Court House, on South Tryon Street.

THE PILLARS OF MEDICAL SOCIETIES. WHO ARE THEY?

Now and then, from this or that corner, in rural and metropolitan districts, we may hear it whispered, or spoken, or bawled out that the Perkville Medical society is built upon sordid gain, and domineering ambition and monopolized by the Sawyer or Jones crowd. In many ways, circuitous and straight, it is deftly conveyed to us or hinted at that the highbrows of medical science rub elbows with a ring of politicians, and "run things" between themselves, mainly to advance their rating at Bradstreet's and Dun's. Or, some one, on the rear seats remarks, between his All Havanas that our pleading in behalf of a certain question, is, after all only mental ropewalking, because Professor Brass solved that problem definitely in one lecture no longer than fifteen years ago. Thus buffeted between reality and falsehood, between our personal idealism and gross circumambient materialism do we not, gentle reader, often ask ourselves the question: who are the pillars of our medical society? Considering that art is long, but life short and opportunity fleeting, and remembering how frail even the best of us are, is it not quite human to shout this question, like Diogenes Teufelsdrokh, from the promontory of interrogations, and strain our ears for an answer? Let us rest assured that medical societies cannot be perpetuated by acted or spoken lies, by upright or presumptious "leading men." Henryck Ibsen has shown us that neither teachers nor divines, neitheir men nor women, neither poets nor captains of industry, are the pillars of society at large, but that the spirit of liberty, and the spirit of truth are the foundations of human institutions. The true physician, as a Christian gentleman, has erected a third Corinthian column in the temple of the love of humanity.

And we feel that no medical society can endure unless it spread its roots upon this three-layered soil. We must once for all rid ourselves of the withering suspicion that the Corn Center medical society is built upon self advertising and morbid ambition. In adhering to the local, or, national medical society we are not obeying the summons of sordid gain, or of scheming diplomacy, but we are following the bidden or unbidden call of an inner voice, prompting us to forget local dissensions, and to yield to these divine whisperings. Instead of deliberating a lifetime at the crossroad the good physician sees the light and follows it. Henceforth, he feels a near and overmastering incentive, a leit-motif much higher than Ibsen's, and in tune with the infinite. No longer shall we incline a willing ear to ascertain that the progress of medicine is dependent upon the teaching members of the profession only, or upon physicists, or chemists. Still less shall we ourselves believe that graft, and jealousy, and selfishness can be the basis of a medical fraternity. Nay, we feel that the spirit of freedom, the spirit of truth, and the love of suffering mankind are the real pillars of medical societies, now, and forever.

INDIVIDUAL COMMUNION CUPS.

The following letter explains itself:

March 6th, 1911.

Dr. Edward C. Register,
Charlotte, N. C.,

Dear Dr. Register:—

I am enclosing you herewith a copy of a little pamphlet I am using here in one of the churches. I am presuming that this will interest you and am sending it along on that presumption and solely with the

end of sending you something of interest in view.

With assurance of my high regards, I remain,

Cordially yours,
H. B. Hiatt,
Asheboro, N. C.

There are in North Calolina each year 5,000 deaths from consumption. There are in North Carolina each year 2,000 orphans, the result of consumption. Consumption is spread mainly through the pernicious use of the common drinking utensil for many people. One of the greatest French physicians recently made an experiment to determine the danger of the common cup. Twenty-seven people having comsumption were made to drink out of the same cup, the edge was then wiped with clean cotton and a guinea-pig was then exposed to this cotton—the guinea-pig died of general tuberculosis (consumption.) The wine left in a cup after tubercular persons had drunk from it was analyzed and it was found to contain many different kinds of germs among which were the tuberculosis germs. It is easy to see after these experiments how much harm may be done by the indiscriminate use of the common drinking cups. There are many other diseases that can be transferred from one person to another in this manner. In addition to the sanitary demand for individual cups there is an easthetic demand, this latter is of the least importance, however, a little thought on the subject will convince most any one of the disgust attendant upon the use of the common cup.

Boards of health, school boards, and even legislatures, have been impressed by the enormity of the danger of the public drinking cup. "The abolition of the public drinking cup is a sanitary measure of real importance that has been adopted rather widely within a short time. A least eight states have by statute prohibited the use of the public cup. The boards of health of forty states have recommended the abandonment, and, in addition, numerous city governments have banished the cups from schools and parks. This removes from a considerable proportion of the population and undoubted prolific source of danger to public health."

There are many people who have consumption that do not know it, and it is undoubtedly true that some of the peogle suffering with consumption or other communicable diseases will find their way to the communion cup, and it is a privilege that ought not to be denied them.

There is no phase of the whole scheme of christianity whereby the christian spirit can be better manifested than in preventing sickness or injury to others. Christ was not only the first great healer but he was the first disciple of prevention. His idea was a helathy soul, and a healthy soul in nearly all cases is a guarantee of a healthy body.

When we pass the communion cup from one person to another we are in great danger of being the means of communicating disease from one life to another. Thus in the celebrating of an ordinance which has for its object the blessing of life, we may be the means of bringing to a young life a disease which will rob it of its strength, its joy and its usefulness. Conscious, therefore, of the danger which we hold in our hand, are we willing to continue this custom fraught with much peril, unless there is some urgent reason for its continuance? Is there any sane reason for not changing from the common communion cup to the individual cup? There seems to be none. Neither the scriptures nor the church prescribes a form for the administration of this sacred ordinance. The only objection that can be urged seems to be custom. This long established custom has become sacred to many, but shall custom be held more sacred than life?

The adoption of these cups by our own congregation will call for an outlay of $17.-00. Is it worth this? Is it worth $17.00 to prevent one case of consnmption? Is it worth this amount to afford to the consumptive the knowledge that he may partake of the communion without danger to others? It is worth this and much more. Can't we afford to spend this much for our mutual protection? The conference has favored and suggested the use of these cups. Among the many reasons for the cup we have not been able to find one against their use.

We endorse Dr. Hiatt's position.

MINUTES OF THE THIRTEENTH ANNUAL SESSION OF THE TRI-STATE MEDICAL ASSOCIATION OF THE CAROLINAS AND VIRGINIA.

Held February 22nd-23rd, 1911, at the Elks' Club Auditorium, Raleigh, North Carolina.

The association was called to order by Dr. Hurbert A. Royster, President of the Chamber of Commerce of Raleigh, and an ex-president of the Tri-State Medical Association.

Prayer by Rev. W. McC. White, D. D., pastor of the First Presbyterian Church, Raleigh.

The Hon. W. W. Kitchin, Governor of North Carolina, being presented to the Association by Dr. Royster, delivered a cordial address of welcome, which was responded to on behalf of the society by Dr. A. E. Baker, of Charleston, S. C.

The President, Dr. Joseph A. White, of Richmond, Va., declared the session formally open, and called for the papers in their order.

Papers read at the morning session as follows:

"The Conservation of Sight," Dr. J. W. Jervey, Greenville, S. C.

Discussed by Drs. Rolfe E. Hughes, of South Carolina, and Tom A. Williams, of Washington City.

"Pain in the Area of the Fifth Nerve, Caused by Irritation, Pressure or Pus." Dr. W. Perry Reaves, Greensboro, N. C.

Discussed by Doctors Beverley Tucker, J. Shelton Horsley, Allison Todges, J. C. Walton and Mary Lapham.

'Excision of the Internal Jugular Vein for Streptococcic Thombi." Dr. J. W. Long, Greensboro, N. C.

Discussed by Dr. Reaves.

"Rheumatism," Dr. J. N. Upshur, Richmond, Va.

Discussed by Drs. Walton, Roy, of Washington, Douglas VanderHoof, W. E. Anderson, and A. G. Brown.

Read by title:

"Laryngo-Fissue for Non-Malignant intralaryngeal growth," Dr. Clifton M. Miller, Richmond, Va.

"Peripheral Operations in Tri-Facial Neuralgia," Dr. LeGrand Guerry, Columbia, S. C.

"The surgery of the Thyroid Gland," Dr. John E. Cannady, Charleston-Kannawha, W. Va.

"The Functions of the Ductless Glands," Dr. H. Bascom Weaver, Asheville, N. C.

"Immunity," Dr. Ben K. Hays, Oxford, N. C.

AFTERNOON SESSION.

Called to order by the President.

Papers read as follows:

"The Doctor's Burden: A Plea for the (Medical) Chronics," Dr. John C. Walton, Richmond, Va.

Discussed by Doctors Horsley, Tom A. Williams, and Upshur.

Upon motion of Dr. Jospeh Graham, visitors and none-members were accorded the privileges of the floor, and requested to participate in the discussions.

"The Necessity for the Establishment of Additional Strictly Medical Hospitals," Dr. J. Allison Hodges, Richmond, Va.

Discussed by Doctors Walton, Hooe, Williams, Ben Johnston, Upshur, and Joseph Graham.

"Commercialism Pervading the Medical Profession: The Style of the Man, and the Remedy." Dr. A. Bascom Croom, Maxton, N. C.

"Insults to Digestion," Dr. M. O. Burke, Richmond, Va.

"A Case of Unusual and Extensive Injury to the Liver," Dr. Geo. Ben Johnston, Richmond, Va.

"Cholecystitis; Its Complications and Sequelae," Dr. A. Murat Willis, Richmond, Va.

"Jaundice," Dr. Douglas VanderHoof, Richmond, Va.

Discussed by Dr. Long.

"Jaundice." Dr. Douglas VanderHoof, Richmond, Va.

Discussed by Dr. Long.

"Obstruction of the Bowels," Dr. A. Barnes Hooe, Washington, D. C.

Discussed by Drs. J. T. Burrus, Ben Johnston, and Murat Willis.

Read by title:

"Ethics in Medicine and Surgery," Dr. Fred L. Potts, Spartanburg, S. C.

"The Surgical Treatment of Dyspepsia," Dr. Stuart McGuire, Richmond, Va.

"A New Instrument for Gastro-Erostoies, and Its Practical Application," Dr. A. G. Brenizer, Charlotte, N. C.

EVENING SESSION.

Called to order by Dr. Joseph Graham, Vice-President from North Carolina.

President's Address.—"Preventative Medicine," Dr. Joseph A. White, Richmond, Va.

Upon motion of several, the President's Address, and the paper read by Dr. J. W. Jervey, were reterred to the Council, with the request that it instruct the Secretary to have these two papers published, not only in the Medical Journals of the three States, but in some good monthly lay journal, published in the South. The Council instructed the Secretary to this effect.

THURSDAY MORNING, FEBRUAR 23rd.

The President in the chair.

"Cancer of the Face, with Report of Cases," Dr. A. E. Baker, Charleston, S. C.

Discussed by Dr. Walton.

"Report of Interesting Surgical Cases," Dr. J. F. Highsmith, Fayetteville, N. C.

Discussed by Dr. A. E. Baker.

"Report of Cases," Dr. J. S. Irvine, Danville, Va.

Discussed by Dr. LaRoque.

"Some Surgical Suggestions," Dr. J. E. Rawls, Suffolk, Va.

"Preventative Surgery," Dr. G. Paul LaRoque, Richmond, Va.

Discussed by Doctors Williams, Long, Templeton, Burrus and Hooe.

"Nitrous Oxide-Oxygen Anesthesia," Dr. Southgate Leigh, Norfolk, Va.

Discussed by Doctors Roy, Guerry, Hooe, Anderson, and Templeton.

"Stone in the Ureter," Dr. Robert C. Bryan, Richmond, Va.

Discussed by Doctors Horsley, Gray, Guerry and Long.

"The Diagnosis and Trteatment of Tumors of the Brest," Dr. J. Shelton Horsley, Norfolk, Va.

Discussed by Doctors Guerry, Burrus, Long, Upshur, Rankin, and LaRoque.

Read by title:

"Congenital Dilation of the Colon: Giant Colon, or Hirschsprung's Disease," Dr. Chas. M. Rees, Charleston, S. C.

"Abnormalities of the Colon; Report of two Cases, with Remarks," Dr. B. B. Steedly, Spartanburg, S. C.

"Does Appendicitis Cause Dysmenorrhoea," Dr. Chas. R. Robins, Richmond, Va.

"Dysmenorrhoea," Dr. S. P. Pierce, Durham, N. C.

"Pregnancy Following Complete Removal of One Overy, and at the Same Time the Maior Portion of the Opposite One," Dr. J. Ernest Stokes, Salisbury, N. C.

"Detched Cyst of Ovary Nourishment Through Adhensions to Appendix," Dr. J. Rainey Parker, Goldsboro, N. C.

"The Early Diagnosis of Carcinoma of the Uterus," Dr. Frank H. Hancock, Norfolk, Va.

"The Diagnosis of Genital Gonorrhoea in the Female," Dr. R. N. Duffy, New Bern, N. C.

AFTERNOON SESSION.

The President in the chair.

"The Surgical Relationship Between Uterine Fibroids and the Loss of Cardiac Compensation," Dr. R. L. Payne, Jr., Norfolk, Va.

Discussed by Drs. McNider, C. M. Strong, Brown and Horsley.

Report of the Commtitee on Cancer Education read by the Chairman, Dr. Southgate Leigh, Norfolk, Va., and present committee retained for another year.

"A Consideration of Sudden Death in some Medical Diseases," Dr. A. G. Brown, Jr., Richmond, Va.

Discussed by Drs. Roy and Hodges.

"X-Ray Diagnosis," Dr. A. L. Gray, Richmond, Va.

Discussed by Doctors Williams, Hazen and Graham.

"Frontal Sinusitis; Diagnosis and Treatment," Dr. Wm. F. Mercer, Richmond, Va.

Discussed by Dr. Hazen.

"Recent Progress in the Diagnosis and Treatment of Syphilis," Dr. A. J. Crowell, Charlotte, N. C.

"Report of Some Cases Treated with 606," Dr. Lawrence T. Price, Richmond, Va.

"The Golden Years," Dr. Thomas W. Murrell, Richmond, Va.

Discussed by Dr. Williams.

"Nervous Disorders and the Neurologist in Relation to the Profession and the Public," Dr. Tom A. Williams, Washington, D. C.

"Mental Hygiene in Children," Dr. Paul V. Anderson, Morganton, N. C.

"Poliomyelitis: Reports of Cases Electrically Treated," Dr. Chas. M. Hazen, Richmond, Va.

"The Treatment of Poliomyelitis with Special Regard to the Prevention of Deformity," Dr. Beverley R. Tucker, Richmond, Va.

Read by title:

"The Possibilities of the Bloodclot," Dr. Lucien Loften, Emporia, Va.

"Operative Treatment of Simple Fractures," Dr. Joseph Graham, Durham, N. C.

"Hodgkkin's Disease, with Report of Cases," Dr. Harry T. Marshall, Charlottesville, Va.

"The Symptomatology of Amoebic Infections, Dr. Wm. Allen, Charlotte, N. C.

"Municipal Sanitation," Dr. Watson S. Rankin, Raleigh, N. C.

"Smallpox Epidemics," Dr. C. A. Woodard, Durham, N. C.

"A Report of Fourteen Cases of Vasectony in the Mentally Unsound With Beneficial Results," Dr. Chas. V. Carrington, Richmond, Va.

"Atypical Onset of Typhoid Fever, with Report of Cases," Dr. J. McCaw Tompkins, Richmond, Va.

"The Medical Treatment of Ingrowing Toe Nails," Dr. Stephen Harnsberger, Catlett, Va.

"Esperanto; Its Value to Physicians," Dr. W. J. Burdell, Lugoff, S. C.

"Multiple Adenomata of the Rectum, with Report of a Case," Dr. E. H. Terrell, Richmond, Va.

"Are We Menaced by Race Suicide," Dr. Thomas E. Anderson, Statesville, N. C.

"A Report of Nine Cases of Pulmonary Tuberculosis Treated by Compression of the Lungs," Dr. Mary E. Lapham, Highlands, N. C.

The Association tendered its thanks, by rising vote, to the Wake County Medical Society, the hotels, the Capital City Club, the Elks—for the use of their hall—and the press, for the many courtesies extended the members during their stay in Raleigh.

Report of the Council read by Dr. Upshur, as follows: President, Dr. J. Howell Way, Waynesville, N. C.; vice-president for North Carolina, Dr. Thos. E. Anderson, Statesville, N. C.; vice-president for Virginia, Dr. W. E. Anderson, Farmville, Va.; vice-president for South Carolina, Dr. F. H. McLeod, Florence, S. C.; secretary-treasurer, Dr. Rolfe E. Hughes, Laurens, S. C. Councillors: Drs. E. C. Register, Charlotte, N. C., W. W. Fennell, Rock Hill, S. C., Samuel Lile, Lynchburg, Va.

Time of next meeting, third Wednesday in February, 1912.

Place of meeting, Columbia, S. C.

The President-Elect was inducted into office, who adjourned the meeting, sine die.

ENTERTAINMENTS.

The members of the Society, and the visitors, were given a delightful smoker and vaudeville at the Capital City Club on Wednesday night, by the Wake County Medical Society, and on Thursday a reception was tendered by the Wake County Medical Society to the Association and the ladies, at Rex Hospital. Invitation was also extended the members of the Association to visit the colored hospital and the other hospitals of the city.

THE ABUSE OF THE GAUZE PACK IN ABDOMINAL SURGERY.

In one of the large cities of this country, there are at present no less than eight suits, docketed against as many surgeons, to recover damages, due to gauze or other material left in the abdomen during an operation. These cases are seemingly of increasing frequency and we believe that to a very great extent they are unnecessary, and should never occur. We do not mean by this, to intimate that due care is not exerted, in keeping account of the gauze introduced into the abdomen, though this may be so at times, bu that too much gauze is being used in abdomens all over the country, and necessarily at times the fallible human misd fails to keep track of a piece, with the most disastrous results. There is no doubt the practice is follpwed promcuously and to a great excess, necessarily to the detriment of the patient, even if it is all removed before the wound is closed, and at times to the chagrin and financial loss of the Surgeon when a piece is overlooked, not to mention what happens to the patient.

It has been most effectually demonstrated that the healthy pentonem will resist tremendous amounts of infection, and that an injured pentonem is an absober of infection that defies competition. Why then in operations should we wall off the pentonem, when we know that each piece of gauze introduced into the abdomen means added tromea, added injury to the delicate endotheteal coat. and an added insult to nature that is soon to be resented. There are many worse things than pus in the peritorecal cavity and we believe that the gauze pack is the worst of the lot. Most abdomnal operations could be as well, and as quickly done, without the pack as with it, and granted that the pentonem may be soiled by a little pas or a little blood, if the the endotheteal covering is not obsoded by gauze or rough handling, but left intact no harm will result, and these fluids will be amply taken care of less tendency to septic conditions, adhesions, and post operative ileus, than if gauze had been used. Morris says we have reached the age of physiologic surgery, but if it be a fact, the promiscuous use of the gauze pack is certainly not a practical demonstration of it. Every piece of gauze coming in contact with the peritonem means extra traema, and this extra traema always means an added tax upon the resisting power of the patient, besides a chance of a piece overlooked and left behind with all the consequences that may follow.

To our mind the pack adds nothing to the safety of the patient except possibly in some cases of deep work. It takes time, causes trama and may be death dealing if left behind and should therefore be absolutely avoided whenever possible. It should always be our aim to accomblish our end with the least possible damage to the tissues, and this seems to be the place where a much need reform might be instituted.

EDITORIAL NEWS ITEMS.

Dr. B. F. Royal has recently located in Morehead City, N. C., for the practice of Medicine. Dr. Royal is an A. B. of the University of North Carolina and an M. D. of Jefferson Medical College, Philadelphia.

Morehead City, N. C., will shortly have a modern hospital accommodating twenty patients. Special, attention will be given to diseases of children, for this reason physicians throughout the state may send their sick baby patients there, secure in the fact that they will have the best of attention and the benefits of the salt air. This hospital is not a private institution, but has been founded by the public spirited citizens of Morehead City. The hospital will be an incorporated company, and will be known as the Morehead City Hospital. It will be open for the reception of patients in about two months.

Dr. H. M. Bonner has recently located in New Bern, N. C., for the practice of diseases of the eye, ear, nose and throat, and general surgery.

Dr. J. Howell Way.

At the recent meeting of the Tri-State Medical Association of the Carolinas and Virginia, which was held in Raleigh, N. C. February 22-23, Dr. J. Howell Way, of Waynesville, N. C., was elected President of that organization.

Dr. Way was for many years, secretary of the North Carolina Medical Association, and was one of the best that organization ever had. During the time he was secretary, this society reached the maximum of its membership; the attendance at its meetings, and the maximum amount of its scientific work.

At the Morehead Meeting of the North Carolina Medical Association Dr. Way was elected its President. He has been a member of the State Board of Health of North Carolina for a number of years, and secretary of the Tri-State Medical Association for several years. The Executive Council at Raleigh acted wisely and justly in selecting Dr. Way President of that association.

Dr. Rolfe E. Hughes, of Laurens, S. C., who was at one time a most excellent secretary of that body, and who was subsequently made its President, has been re-elected secretary.

With Dr. Way as President and Dr. Hughes as Secretary of the Tri-State, is assurance a plenty that this organization will continue to do as good work and as scientific work as any similar organization that exists.

We are glad to state that Dr. J. R. Langford, a prominent physician of Swansea, S. C., was found to be not guilty of the malpractice, which Mr. W. Q. M. Berry, of Lexington, S. C., accused him of being.

Dr. L. G. Blake, of Spartanburg, S. C. was appointed surgeon for the Southern Railway Co., on Jan. the 24th.

Dr. Blake graduated from the Medical Department of the University of Pennsylvania in 1888, and we feel confident that he is very capable of filling the position to which he has recently been elected.

Dr. T. L. Cornwell a prominent physi-

cian of Chester County, S. C., was found dead in bed at the Chester hotel, on the 9th of Januarv. The cause of his death is unknown.

Dr. Cornwell graduated from the Medical College of South Carolina in 1888.

The Laurens County Medical Society held its annual meeting on February the 27th, in the office of Dr. R. E. Hughes, Laurens, S. C.

The principle event of the meeting was to elect officers for the ensueing year. They were chosen as follows: President, Dr. T. W. L. Bailey, of Clinton; Sec. and Treas. Dr. Jesse H. League, Laurens.

Delegates to South Carolina State Medical Association: Drs. Darroh Ferguson, and R. E. Hughes.

Dr. M. P. Crawford, of Lancaster, S. C. died suddenly on Jan. the 11th, in Chester, S. C., where he had been undergoing treatment for about three weeks.

Dr. Crawford was one of Lancaster's most prominent physicians. He graduated in Medicine from the South Carolina Medical College, and in 1881. He was also a graduate of the University of New York.

To Guard Against the Inroads of Disease.

An excellent way to guard against the inroads of disease is to feed to the tissues nutritious elements which, when incorporated within them add greatly to their powews of resistance. For generations cod liver oil and the hypophosdhites have been considered as leading "tissue-makers" and as combined in Cord. Ext. 01. Morrhuae Comp. (Hagee), they have grown into still greater favor. Cordial of the Extract of Cod Liver Oil Compound (Hagee) charges the tissues with the very elements needed to resist disease processes and for this reason it has held the profession's favor these many years.

At a recent meeting of the Union County Medical Society (South Carolina) the following afficers were elected for the present year: President, Dr. D. H. Montgomery, Union, vice-presidents, Dr. G. F. Mosely, Cross Keys, and Dr. T. P. Kennedy. Union; secretary and treasurer., Dr. R. R. Berry, Union.

The Medical society of the Second district of South Carolina, met in Bamburg on Jan. 11th. Physicians from Calhoun, Orangeburg and Bamberg were in attendance.

After several hours spent in discussions, papers and talks, the association adjourned to the Mayflower Inn, where an elaborate dinner was served. In the afternoon the Association reconvened in the city hall where an illustrated lecture on the bookworm was delivered by Dr. Ward. The meeting as well as being enjoyable, was of great interest and value.

Belmont County Medical Society of W. Va., at a recent meeting held in Bellaire the following officers were elected for the ensuing year: President, Dr. B. O. Williams, Martins Ferry; Vice-President, Dr. V. N. Marsh, Flushing; Secretary, Dr. J. S. McClelland, Bellaire; Treasurer, Dr. A. C. Beetham, Bellaire.

Etowah County Medical Society, of Ala., at a recent meeting held at Gadsden, the following new officers were installed: President, Dr. H. V. Baskin; Vice President, Dr. J. E. Leach; Sec. and Treasurer, Dr. William C. Williams.

Chattanooga and Hamilton County Medical Society, of Tenn., at the annual meeting held in Chattanooga the following officers were elected: President. Dr. James H. Atlee; Vice-President, Dr. Frank T. Smith; Smith; Secretary-Treasurer, Dr. H. P. Latimore.

Buncombe County Medical Society, at a recent meet the following officers were elected for the ensuing year: President, Dr. C. E. Cotton, Black Mountain; Vice-President, Dr. H. H. Briggs; Secretary-Treasurer, Dr. C. S. Tennent.

At a recedt meeting of the Cabarrus County Medical Society (N. C.) the following officers were elected: President Dr. G. D. Moore, Mt. Pleasant; Vice President, Dr. D. G. Caldwell. Concord; Secretary, Dr. J. E. Smoot. Concord.

The secretary informs us that the society is meeting regularly, and is doing a good work.

Book Notices.

Modern Treatment: The Management of Disease with Medicinal and Non-Medicinal Remedies. By Eminent American and English Authorities. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica, Jefferson Medical College, Philadelphia; Physician to the Jefferson Hospital; Author of "A Text-book of Practical Therapeutics," "A Text-book of the Practice of Medicine," etc.; assisted by H. R. M. Landis, M. D. Medical Director to the Phipps Institute for Tuberculosis and

Physician to the White Haven Sanatorium. In two very handsome octavo volumes, comprising 1800 pages, with numerous engravings and full page plates. Price per volume in cloth, $6.00, net; half morocco, $7.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1911.

Scarcely two months have passed since the appearance of the first volume of "Modern Treatment," and now the work is completed by the issue of the second. From its inception a year ago this enterprise has been characterized by sagacity in its plan, by good judgment in the choice of the right man for each subject, and by unapproached energy in execution. Accordingly it is simultaneously fresh throughout, and justifies its title to the fullest extent, for every line is new and up to date, and the two volumes cover the whole field of present-day practical medicine in the most authoritative fashion. It is a unque opportunity, therefore, that is now offered to the profession to acquire the pith and essence of modern therapeusis in a form for instant reference. The work will find its natural place on the physician's desk rather than on his shelves and is a handbook of helpful information for daily use rather than an encyclopedia.

This volume covers the treatment of parasitic, circulatory, digestive and respiratory diseases, those of nutrition and the diatheses, of the nervous system and genito-urinary apparatus, the skin, the eye and the ear.

Case Histories in Pediatrics. A collection of Histories of Actual Patients selected to illustrate the Diagnosis, Psognosis and Treatment of the most Important Diseases of Infancy and Childhood. By John Lovett Morse, A. M., M. D., Assistant Professor of Pediatrics, Harvard Medical School; Associate Visiting Physician at the Infants Hospital and at the Children's Hospital, Boston. Boston: W. M. Leonard 1911.

This book presents a Post Graduate Clinical Course in Diseases of Children.

The Author has selected One Hundred actual Case Histories, classified them under Section headings, "Diseases of Nutrition" etc., and considered each case under the captions History, Physical Examination, Diagnosis, Prognosis and treatment exactly as he has done before his post graduate classes.

A very complete Index makes the book valuable for systematic reference.

There is a vitality in this kind of book that is refreshing. It deals with actual conditions as the doctor meets them. It is absolutely true throughout without possible error or misstatement for these are actual cases. There is not a superfluous line in the book.

It is a book which the doctor will read for a short or longer time with interest and to which he will look for helpful suggestion as to a consultant and not be disappointed.

We know of no more valuable book upon this important subject published in recent years for the doctor's actual use.

Differential Diagnosis. Presented through an Analysis of 383 cases. By Richard C. Cabot, M D., Assistant Professor of Clinical Medicine, Harvard Medical School. Octavo of 753 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, $5.50 net.

This book is intended as a study of medicine from the *presenting symptom* view point. The author says that diagnosis are missed (a) usually because physical signs are not recognized; (b) occasionally because physicians do not think correctly.

To make the book a reasonable size, the author selected and discusses sixteen symptoms, which are most often complained of by patients.

The book contains figures, tables, diagrams, and charts, all of which are very helpful to the reader.

The volume is of medium size, containing 751 pages of reading matter, which both the publishers and the author have studied with one aim to make the book attractive as well as valuable.

A Handbook of Practical Treatment. In three volumes. By 79 eminent specialists. Edited by John H. Musser, M. D., Professor of Clinical Medicine, University of Pennsylvania; and A. O. J. Kelly, M. D. Assistant Prof. of Medicine, University of Pennsylvania. Volume 1: Octavo of 909 Pages, illustrated. Philadelphia and London; W. B. Saunders Company, 1911. Per volume: cloth, $6.00 net; Half morocco, $7.50 net.

The first part of this work is devoted to a discussion, from a general viewpoint of various theropeutic measures; the latter part, to the special treatment of the many general and local diseases.

In general, an effort has been made not to overburden the several discussions by citing a multiplicity of methods of treatment and presenting to the reader the embarrassment of choice; only those methods of treatment have been described which the several authors, believe to merit the confidence of the profession, as being the best, the most efficacious, and most modern.

The volume contains 909 pages of care-

fully indexed reading matter. The publishers have been very successful in making the volume most attractive in its binding and illustrations.

Abstracts of the Leading articles of the month.

The Value of Sanatorium Treatment in Pulmonary Tuberculosis.

Tewksbury, Va., Semi-monthly, says: The advantages of sanatorium treatment are threefold, 1st. It gives the patient the best chance to effect a cure. 2. It removes a source of infection from the home community. 3. Each patient returning from the sanatorium is an educational factor in his home community. In regard to diet, stress is laid upon the value of milk as opposed to raw eggs, from the fact that it has less tendency to derange the digestion when used over a considerable period of time. Another important advantage in the sanatorium treatment is the fact that patients are removed from sexual temptations, a result which seems impossible o attainment under home treatment. The use of tuberculin in selected cases is advocated, to be used according to the tolerance method, beginning with small doses and gradually increasing to the point of tolerance. Two classes of patients seems to be favorably influenced by tuberculin, early cases who do not respond well ts general treatment and more advanced chronic cases in which the pulmonary condition is stationary. Patients in whom the lesion shows much activity are not benefitted by tuberculin. In summing up the author finds that 95 % of his patients staying over three months are discharged as improved and of these 65% are discharged as apparently cured or arrested.

Ophthalmia Neonatorum.

Dr. Jos. A. White, of Richmond. Va., says, in a recent article that among the preventable afflications of the human race is the blindness resulting from the purulent ophthalmia of infants. This plague has been made the subject of special Legislation by the A. M. A., and through its subcommittees in every State, has tried to get State Laws for its suppression, and the Russell Sage Foundation has appropriated money to assist in this work. It is readily preventable, and every physician knows or should know its cause, its infectious character, its danger to sight, its prophylaxis, and its treatment when preventive measures have not been taken. When it occurs in the practice of any physician, it is due to his negligence or ignorance.

Therefore, every case is a disgrace to the profession, and a blot on our civilization. Think of it! 60,000 blind persons in the U. S., of which 20% or %45 are blind from ophthalmia neonatorum, blind because of the culpable negligence of members of our profession, or because of the ignorance of the midwives who have officiated at the births in place of the physicians. What a commentary on modern up-to-date preventive medicine.

Should not something be done to make our preventive knowledge effective, and save the sight of these little ones? A campaign of education should be instituted among physicians to awaken them to the importance of this subject, and the public made to understand what it is and what should be done to prevent it, and among midwives to make them appreciate one of their most essential duties in their attendance upon a birth. Legal enactments should be passed in every State, making birth reports obligatory (a most important factor in vital statistics) within 36 hours by whoever presides at the birth, and in addition a report within six hours of any trouble manifesting iiself.

Midwivss should be placed under legal control, by requiring them to be registered, and licensed, and to meet certain requirements before being registered, and to be held responsible for neglect in reporting births or ophthalmia promptly, under penalty of losing their license.

Both physicians and midwives should be compelled to use the prophylactic treatment in all infant's eyes at birth, and this can also be accomplished by proper legislation, as has already been done in some States.

The advantages yf Sulphur as an Intestinal Antiseptic.

Wild (Proceedings of the Royal Society of Medicine) says:

1. It is almost tasteless and easily administered.

2. It is insoluable in the stomach, and the greater part of it passes along the whole length of the alimentary canal.

3. It does not interfere with the action of any of the digestive secretions.

4. It forms active antiseptic substances in the intestines when their contents become neutral or alkaline. Some of these substances are gaseous and penetrate to all parts of the intestine.

5. It is sufficiently nonpoisonous to be given in effective doses.

It has valuable laxative properties which promote an early evacuation of the intestinal contects.

7. It is cheap.

To Guard Against the Inroads of Disease.

An excellent way to guard against the inroads of disease is to feed to the tissues nutritious elements which, when incorporated with them add greatly to their powers of resistance. For generations cod liver oil and the hypophosphites have been considered as leading "tissue makers" and as combined in Cord. Ext. IO. Morrhuae Comp. (Hagee), they have grown into still ffreat favor. Cordial of the Extract of Cod Liver Oil Compound (Hagee) charges the tissues with the very elements needed to resist disease processes and for this reason it has held the profession's favor these many years.

"Castor Oil as Sweet as Honey."

House of the Angel Guardian —Boston, Mass:—We have given Laxol (castor oil as sweet as honey) a most thorough trial in our institution, and cheerfully say we have never found any laxative and cathartic so effective and so pleasant to take. Children readily take it, and we find it leaves the bowels and stomach in perfect condition. We cheerfully recommend it to all as a very useful article for every household.

Respectfully,
BROTHER BELLARMINUS,
House of the Angel Guardian.

Congenital Family Cholaemia.

Falconer. and Anderson in the Edinburgh Medical Journal mentions the case of a patient, a boy of seven years years, referred for examination, not because of any symptoms of illness, but picked out by a school medical officer for investigotion. He is the third child of healthy parents, and has been jaundiced since within a few weeks of birth. The eldest child died at six months, having been deeply jaundiced during the whole of that time; the second child is normal. The patient's icterus varies in degree from time to time; when it increases he is easily tired and drowsy, but in the usual way he has no symptoms at all. He has passed successfully through an attack of measles. He has never had any epistaxis or other hæmorrhages. The spleen is much enlarged and extends an inch below the costal margin; there is no other abnormality to be discovered, save in the examination of the blood, which shows only 2,800,000 red cells and 35 per cent. of hæmoglobin; there is also a definite tendency to microcytosis and polychromatophilic degeneration. The leucocytes are about normal; the blood serum contains bile pigment. The urine is not abnormal and never contains bile pigments; the stools are well coloured' and when the jaundice is most marked they are dark green. The liver is apparently normyl. This syndrome is one of which a great many cases have now been published since Nimkowski first described it in 1900. The cases vary in details, but this is a fairly typical case in all essential respects, The condition affects, and can be transmitted by, both sexes; it is compatible with long life, for cases have been reported at seventy-four, seventy-four and eighty-one. In cases which have come to autopsy the chief findings have been perisplenitis, with increase of the spleen pulp due to engorgement, with red cells. Gall stones have been reported five times. Most writers agree to ascribe the condition to hæmolysis and diminished resistance of the red cells.

Auscultation of Joints.

In a paper read before the Royal Society of Medicine, and printed in the Lancet, Dr. Garrod describes the diagnostic uses of auscultation when dealing with diseases of joints. An ordinary stethoscope is used; after a little practice it is possible to dispense with an extta small chest piece, a rubber ring, or other aid to coaptation. The knee is the joint which best lends itself to auscultation, at either side of the patella it is easy to apply the stethoscope, and to hear abnormal sounds when the joint is flexed and extended. Most of the other large joints can be similarly studied, and even some of the small joints also. A normal joint in a young subject is silent, save for the loud clicks which some people can produce at will; these are vacuum sounds. In those past middle age there may be abnormal sounds when the patient is quite unconscious of any articular disability; probably these are premonitory signs of osteoarthritis. A distended joint is noiseless, but crackles, appear as the fluid is absorbed and the synovial surfaces are once more in contact; these noises resemble those heard with the stethoscope over the site of surgical emphysema. Tubercular joints are usually silent, and so are those in the acute forms of rheumatoid arthritis; in both diseases the main stress of the inflammation is in the periarticular tissues. Scrunching sounds are typical of osteo-arthritic changes, erosion, and such like. A rubbing, friction-like sound is heard in late stages of rheumatoid arthritis; and just as characteristic is another sound which can be heard over inflamed tendon sheaths. The author lays down no definite rules, but suggests that further study may tend to establish the method as one valuable in the differentiation of articular diseases.—The London Hospital Journal.

Management of Cardiac Insufficiency.

Guthrie, (New Orleans Med. and Surg, Journal), claims that the treatment of heart disorders resolves itself largely into treatment of the heart-muscle to secure a reserve of force. These is absolutely nothing to be done for a diseased valve, and even when kidney or vessels are first diseased the heart-muscle is the point toward which we must direct our therapy.

To this end, we must lighten the labor of the muscle by depletina measures, purgatives, diuretics if the kidneys are sound, rest in bed where possible; by the use of opiates if there is distress; by cutting down the consumption of fluids to the lowest limit. Digitalis prolongs the rest period in the heartbeat; but in most instances it is needed at some time or other. Rarely will nitrites have to be resorted to at the same time to combat the constricting effect of digitalis. Arterial hardening usually means that the iodides will do no good.

Forced sweating is dangerous when the heart is decidedly weak; if done at all, it is best carried out with an ice bag or a cold coil resting over the heart. Restriction of sodium chloride ingestion assists absorption of fluids, or at least hinders their accumulation. The heart-muscle must be well fed in order that it may build up. while food must be such as to cause the least possible increase of blood pressure.

Cordite Eating.

In Simpson's "Medical History of the South African War," now appearing in the Journal of the Royal Army Medical Corps, is given the result of a special inquiry instituted into a new drug-habit which first came to light during that campaign. Owing to the dearth of matches, the men got into the habit of using the little rods of cordite with which their cartridges were loaded, in order to light their tobacco. The peculiar virtue of this substance is that it can be ignited at a comrade's pipe, and can then be used to set light to the owner's tobacco. Some of the men discovered that the inhalation of the fumes of this burning cordite had a narcotic effect. From this to the ingestion of cordite by the mouth either solid or dissolved in tea, was only a step. In those unaccustomed to the use of the drug even a small dose causes most unpleasant symptoms, chiefly a very severe racking headaehe. But the habitue can swallow the entire contents of one cartridge. His face flushes, his head throbs and seems too well, and after a quarter of an hour or she falls into a deep sleep. On awaking there is thirst and headache. Taken in hot tea, the effect is delirium, followed by sleep. Morphia, opium, and alcohol in small quantities are "pick-me-ups" after cordite eating; and inversely some men used cordite as a reviver of alcoholic excess. Optical and mental delusions, timidity weakness, and general breakdown, moral and physical, result from long use of cordite as a drug.—The London Hospital Journal.

Sulphur Compounds as Intestinal Antiseptics.

In a paper read before the Royal Society of Medicine, Prof. R. B. Wild stated that in addition to its action as a mild purgative, sulphur has a definite antiseptic action in the intestine, owing to the formation of hydrogen sulphide when becterial decomposition takes place in its presence.

To this action may probably be attributed the traditional efficacy of sulphur and of sulphurous waters in chronic gout and rheumatism, and in certain skin euptions. The superiority of sulphates as purgatives is in part due to their reduction to sulpnides in the bowel. The preponderance of plants containing surphurous volatile oils among those used dietetically is remarkable. Long continued administration of sulphur causes depression. Sulphur is tasteless, ihsoluble in the stomach, without action on digestive enzymes, forms in the intestine antiseptic substances which penetrate to all parts of the bowel, has valnable laxative properties, and is cheap.—The Dondon Medical Lancet.

Eucalyptus in Eczema Capitis.

Atkinson related a case of eczema capitis in a girl aged twelve years who had no previous history of seborrhea. When first seen the entire scalp of the patient was affected. The hand was covered with a scab, which, when removed, left a raw inflamed surface, from which serum freely oozed. The disease extended behind both ears, and fissures had developed. Both meatuses were attacked. The child was put on cod-liver oil and the usual remedies applied. The hair was clipped short a dozen times, which often resulted in a temporary improvement, but which was always followed by a relapse.

The author finally made up an application consisting of acid salicylic 3j, ol. eucalppti 3j, ol, olivæ ad 3vj, which was rubbed into the scalp twice a week. A speedy and seemingly permanent cure resulted. The ears were syringed with a carbolic solution 1:80 and then were moistened with the oil by means of a cotton-wool pledget on a probe.—Brit. Med. Journal.

The use of Belladonna in Dyspepsia.

Clinical experience having established the fact that the administration of belladon-

na led to a defidite amelioration of the subjective manifestations of certain types of dyspepsia. F. C. Moore and L. Kilroe decided to conduct a systematic investigation into the action of this drug on the functional activity of the stomach in a series of consecutive cases, both with and without manifestations of gastric disorder. This investigation confirmed and to an extent amplified the previous observations of Riegel, who demonstrated that belladonna exerted a definite inhibitory effect on the secretory activity of the stomach.

The administration of the drug along with, or some short time previous to, a test meal was associated with a well marked diminution of the acid and peptic values of the stomach contents; this effect was generally greater in such pathological conditions as were associated with hypersecretion, but still obtained in conditions of hyposecretion. The effect of the administration of bellaeonna on the volume of the stomach contents was but slight, and variable; but while by this method it would appear that the drug influenced but little the emptying of the stomach, more recent radiographic observations caused them to believe that it exested an influence in inhibiting and relieving spasmodic contractions.

In the discussion which followed the reading of the paper A. F. Hertz said that he found belladonna useful in the treatment of gastric and duodenal ulcer. He said that there was a remarkable difference between the action of atropine on the salivary secretion and the gastric secretion. In the one a diminution in quality with no change in quantity, and in the other a change in quality with no change in quantity.—British Med. Journal.

Irritation of Skin from Mercurial Lotion

An extraordinary case of susceptibility to poisoning by mercurial lotion is reported in "Le Progres Medicale" by Tissier and Corpechot. The patient, a healthy woman of thirty-two, was admitted to hospital for her sixth pregnancy. She gave a history of having suffered at her previous confinment from an eruption of the lower abdomen, inner surface of the thighs, and around the anus, which she attributed to the use of corrosive sublimate for cleansing the parts during the puerperium. With the exception of a rash which covered the whole of her body at a time when her first child died of meningitis at the age of nine months, no history of cutaneous eruptions other than those connected with her lying-in could be obtained. Inconsequence of her statement, care was taken to avoid using mercurial preparations for sterilization purposes during her lying-in. After the child was born, however, and before the placenta had been removed, the midwife sterilized her hands in a solution of 1 in 1000 mercury oxycyanide. She then expressed the placenta. The same evening the patient complained of a smarting in the region of the umbilicus, and a patch of erythema was noticed corresponding in position to the place where the midwife's hand had rested when applied to the fundus uteri. Next day this patch was even more defined, the affected skin being red and slightly raised above the surrounding level, minute vesicles containing fluid being scattered over it. This fluid was at first colorless, but gradually became turbid and yellow. A sensation of itching was present. The erythema faded gradually after the third day. At no time were there any general symptoms, nor were there any signs of an eruption elsewhere on the body.—The Hospital Journal London.

The Faradic Current in Aphonia.

Johnson reports a case of aphonia of twelve years' duration following laryngitis, and a similar case of more than two years' duration, both of which were successfully treated by means of external faradization. The secret of success lies in the regular and persistent use of mild currents, which are not calculated to produce violent contractions of opposing healthy muscles. Where the laryngoscope shows marked swelling and congestion of the cords the mucous membrane must be attacked vigorously on orthodox lines, and here again one is likely to meet with little success if the nasopharynx is in an unhealthy condition. The author urges the necessity, in any given case, of making sure that the aphonia has really resulted from such simple causes as catarrh, overstrain, or a combinats of both. Thoracic aneurysm, lesions of the central nervous system, malignant growths, the ulceration of syphilis or of tubercle—these must always be borne in mind as sinister possibilities, and it is at least a waste of time to employ faradization in the case of a patient who subsequently dies from cancer or who is in condition to be cured by iodide of potassium.—The London Medical Lancet.

Functions of the Thymus.

E. Weill presents a study of the functions of the thymus in which he shows that it is not an exclusively lymphoid organ, and that in all its history, physiological and pathological, it presents differences from the lymphoid glands which include the role of the epithelial elements. It arises from

an invagination of the layers of the entoderm at the evel of the third brachial cleft. From the beginning of the fourth month of intrauterine life until the fourth year of life its function is active; then atrophy takes place. At birth it is in great part a lymphoid organ with r distinct covering and a central reticulum filled with leucocytes. Its structure resembles that of the bone marrow. There is a true balance between the development of the lymphoid and the epithelial elements. Injection of the thymus extract causes fall of blood pressure, as does that of the lymphatic glands. But it differs widely from them in its chemical composition. Removal of the thymus in young animals causes at first obesity and a state of edema, later cachexia and atrophy. Its effect is only temporary, showing that its function can be taken up by other organs, such as the genital organs, hypophysis, spleen, suprarenals and thyroid.—Lyon Medical.

Dr. W. W. McKenzie, of Salisbury, N. C., one of the most prominent physicians of this section has returned to his home after an extended visit to Philadelphia and Baltimore.

Dr. McKenzie's horse ran away with him about a year ago, and broke the doctor's leg, which has never regained its normal strength. His visit to Philadelphia was on this occount, and while there he underwent treatment at the Jefferson Hospital. We are glad to state that his condition is very much improved, and he is now able to attend his professional duties.

Dr. Jno. H. Tucker has recently located in Charlotte, N. C. He has his offices in the Realty Bldg. and his practice will be limited to the Eye, Ear, Nose and Throat.

Dr. Tucker is a very competent physician and we feel confident that he will do well here.

State Board Examination Questions of Tennessee 1910.

ANATOMY.

1. What organs are found in abdominal cavity?

2. Describe the abdominal cavity. Muscles and bones that form the same.

3. Name the muscles of the gluteal region, origin and insertion of same.

4. Describe the femur and the bones with which it articulates.

5. What organs are found in the thoracic cavity?

6. Name the facial muscles.

7. Trace the femoral artery. Name the important branches given off by same.

8. Name ten craniai nerves.

PHYSIOLOGY.

1. Name the principal chemical elements found in the human body.

2. Mention the enzymes found in the gastrointestinal canal and the action of each.

3. What is the function of the iron of the blood cells?

4. Name the three cardiac ganglia.

5. What causes the blood to flow in the veins?

6. What are the functions of the suprarenal glands?

7. Mention the principal automatic and reflex centers found in the medulla.

8. What would be the effect of a lesion of the lower half of the pons Varolii?

9. If the left occipital lobe of the brain were destroyed, what would be the effect on the sense of sight?

CHEMISTRY.

1. Give the chemical formula for carbolic acid. How is it obtained and what are its properties and uses?

2. Give chemical 'formula for ethyl chloride. How prepared and its uses?

3. Explain how water and its contained impurities may become purified by running in a shallow stream over a precipice.

4. Give chemical test for free hydrochloric acid in stomach contents.

5. What is the range of the specific gravity of normal urine? State what diseased conditions produce (a) an abnormally high specific gravity of the urine, (b) a low specific graviry of the urine?

6. When testing for glycosuria with Fehling's solution, how do you determine whether the reaction is that of sugar or some other reducing agent?

7. How do you detect bile in a specimen of urine? Name the principal bile pigments.

8, What is the urinometer? State its importance as an aid to diagnosis.

MATERIA MEDICA.

1. What is magnesium sulphate? Give its use in the practice of medicine.

2. From what source is heroin, and what is the dose?

3. Give the source of atropine and dose.

4. What is hydrastis? Give the dose and describe the pathological lesion for which you would use it.

5. What is the source of sulphocarbolate of zinc?

6. What preparation of iron is used in erysipelas? The dose? How often repeated and mode of administration?

7. For what pathological lesion would you use oidine?

8. What is the dose of calcium sulphide? Potassium chlorate. Potassium bromide?

PATHOLOGY.

1. Describe the pathology of the liver, lungs, and blood in pernicious intermittent fever.

2. Give the pathology of the gastric intestinal tract in acute alcoholism.

3, Describe the pathologic changes in the blood in pyemia,

4. Describe the pathology of the blood in septicemia.

5. Describe the pathology of scurvy.

6. Describe the pathology of gonorrheal arthritis.

7. Describe the pathology of the joints in the seat of chronic inflammatory rheumatism.

8. Describe the morbid changes in the valves in mitral stenosis.

PRACTICE.

1. Name the diseases which you expect to encounter in your practice in Tennessee. Name your methods of making diagnosis of diseases.

2. Name the specific causes of lobar pneumonia. What would auscullation and percussion reveal in the first stage of congestion of the lung? Give a treatment for labor pneumonia.

3. What is endocarditis? Name the causes which produce it. Glve treatment for it.

4. Name the specific causes of typhoid fever. How does it gain entrance to the body? Differentiate typhoid fever from remittent fever. Give a general treatment for typhoid fever.

5. What is cerebrospinal meningitis? Name its specific cause. Differentiate between epidemic crebrospinal meningitis and tuberculous meningitis. Give the clinical features of each.

6. Describe the eruption of smallpox. Of chickenpox and of measles. What is the period of incubation of each?

7. Give the difierent diagnosis between tonsillar diphtheria and follicular tonsillitis. Name the treatment for diphtheria.

8. Name the chronic diseases of the liver. What are the symptoms of obstruction of the common bile duct? What are the symptoms and clinical manifestations of biliary calculi? Name a treatment for biliary calculi.

OBSTETRICS.

1. State in detail your management of a normal labor from its inception to its close.

2. Give the differential diagnosis between a primiparous and multiparous woman. How would you calculate the date of confinement?

3. Mention the signs of pregnancy at three months and at six months, naming them in order of their importance.

4. What is your opinion of the Cesarean section? At what time and under what conditions would you advise it?

After the period of viability, how would you diagnose a dead fetus, and, if dead, what would you do, and how would you do it?

6. Given a case of placenta prævia approximating full term, what would you do? Give advantages and disadvantage of various procedures as regards safety of both mother and child.

7. Mention the uterine displacements that are liable to influence (b) conception, (c) pregnancy, and (d) labor, and state the reasons for such influence.

8. Give a differential diagnosis between ovaritis and ovaralgia.

SURGERY.

I. State the constitutional effects and give the treatment of burns.

2. What general principles govern the diagnosis of a tumor?

3. Describe a method of differentiating between (a) the urethra, (b) the bladder, and (c) the kidneys as the source of pus in the urine.

4. State the most common seat of fracture of the clavicle and describe a method of treatment.

5. Describe the steps in the treatment of a scalp wound.

6. Make a differential diagnosis of coma from (a) injury, (b) apoplexy, (c) uremia, (d) opium poisoning, and (e) alcoholic intoxication.

7. What are the symptoms and treatment of a sprained ankle?

8. What arteries need ligating in amputation of the middle third of the leg? Describe your method of ligating.

Dr. K. P. B. Bonner, of Morehead City, N. C., Councilor of the Second District, of the North Carolina Medical Association visited the Martin and Pitt County Medical Societies (N. C.) on the 23rd and 24th of Feb. He reports that The Martin Co. Medical Society has an especially enthusiastic organization, and are doing excellent work. On the occasion of the visit of the Councilor, a delightful banquet was served at the Atlantic Hotel.

Dr. W. H. Dixon moved from Edward to Ayden N. C., on Jan. 1st. to engage in the practice of his profession.

Battle & Co. of St. Louis has just issued No. 15 of their series of Charts on Dislocations. This series forms a most valuable and interesting addition to any physicians library. They will be sent free of charge on application, and back numbers will also be supplied. If you have missed any of these numbers write Battle & Co. for them.

At a recent meeting of the Henderson-Polk County (N. C.) Medical Society the following officers were elected. President Dr. Wm. Redin Kirk; Secretary, Dr. Guy E. Dixon; Delegate to North Carolina Medical Association, Dr. L. B. Morse.

We understand that the society is well organized, meeting regularly, and doing a good work.

Strychnine in Gastric and Intestinal Affections.

Strychnine is used quite commonly to promote the appetite and increase the peristalsis of the stomach and intestines. R. Polak has given strychnine subcutaneously or per os in doses up to 0.01 Gm. to frogs and has found no trace of increased peristalsis of stomach or intestines. After very large fatal doses peristalsis is even markedly diminished and soon ceases altogether. Experiments with the isolated frog stomach gave the same results, for in no case was there an increase of peristalsis, but in some cases distinct diminution and irregularity. The idjection of small doses of strychnine into rabbits had no effect; larger doses paralyzed the intestines so that these were perfectly inactive, while the rest of the body showed general tetanic convulsions. The preparations of strychnine therefore do not seem to have any special action upon the gastro intestinal tract, and their use hardly seems justified since so many other less toxic bitter tonics are available.—Klin.-therap. Woch.

Malignant Disease of the Nasal Passages Its Diagnosis, Pathology and Treatment.

Stuart Law states that malignant disease of the nose may begin outside the nose (extrinsic origin); in its early stages the disease may appear in unusual and obscure forms; and if operated upon in time is often readily amendable to cure. The extrinsic forms are most apt to be confounded with cysts of the antrum (mucocele) and dental cysts. Sarcoma is the form of growth most frequently met with in the interior of the nose. Nasal polypi may become sarcomatous. Carcinomata consisting of squamous cells originate usually in the ethmoid region. Those inheriting thin mucous membranes are most liable to cancer. Carcinoma is more common in the anterum than in the frontal sidus. The author states in conclusion that there are some practical lessons to be learned from a study of this subject: 1. Pain is not to be relied upon as an indication of malignant disease in the nose. 2. Increasing and persistent stuffiness, especially if unilateral, is an important point as regards diagnosis. 3. Recurring and increasingly severe hemorrhage, especially if unilateral, is always a suspicious symptom. 4. A combination of hemorrage and increasing stuffiness is often a serious indication of new growth existing. 5. The making of an early diagnosis is of great importance. 6. It is imperative to make a thorough and systematic examination in all obscure cases of nasal disease, and to remove early a piece of any obstruction in the nasal passages for a pathological report. 7. It is of great importance when there is malignant disease to operate as soon as poesible after a diagnosis has been made to secure a successful removal. 8. It is advisable to adopt the canine-fossa route in operating for the extirpation of intranasal tumors. 9. Innocent and malignant polypi are likely to coexist.—The London Lancet.

Crepitation in the Third Left Intercostal Space in Some Cases of Mitral Stenosis.

Cunnington in The London Medical Lancet, says that in a large proportion of cases of mitral stenosis crepitations are heard in the third left space. The area over which they appear is scarcely larger than a penny placed over the third space close to the eternal margin. Rarely it extends down to the fourth or up to the second space. The crepitations disappear when the breath is held. They are heard only on inspiration, and are more frequent in women; but mitral stenosis is more frequent in women, anyway. They may be present on a given day and absent on another, and are more liable to be present when the heart is distended. They have been found when the compensation is apparently perfect. These sounds forms sphacelotoxin. The percentage of sphacelotoxin varies accurately with the physiological activity of different specimens of ergot. Fluid extract of ergot. Fluid extract of ergot deteriorates so rapidly that even under the most favorable conditions there is a loss of strength approximating 10% a month, and if the drug is exposed to the air, the loss is even greater.

On Recurrent Enlargement of the Salivary Glands.

Greig (Edinburgh Medical Journal) January, 1911, reports five cases, in all of which there was a history of recurrent enlargement of the salivary glands, oftentimes extending over a period of many years. In three instances, the enlargement involved the submaxiliary gland; in the remaining two, the parotid. The enlargement is unilateral and the cause could not be determined. Calculus could be easily excluded. The enlargement was not accompanied by pain and always followed mastication. Mumps could be excluded by (1) the recurrence of the swelling; (2) absence of constitutional symptoms and fever and (3) the fact that the lesion was unilateral.

The author summarizes the literature of the subject and concludes as follows:

Intermittent swelling of the salivary glands is due to (a) Causes connected with perverted secretion: (1) siabolithiasis; (2) sialodochitis fibrinosa; (3) primary xerostomia. (b) Causes connected with the ducts: definite narrowing of the ostium due to (1) trauma (e. g., calculus); (2) ulceration e. g., stomatitis). (c) Causes other than the above, apparently in connection with the glandular function but not yet pathologically defined.

Clinical Lecture on Kidney Pain.

Fenwick, British Medical Journal) says that the commonest structural change accompanying kidney pain is a distended renal pelvis; the commonest cause of kidney pain is a dilatation of the renal pelvis. The onset of excessive thirst with a corresponding low specific gravity of the urine is an important evidence of renal inadequacy. This condition may exist as a result of a distended pelvis. If the patient is forced to sleep on the aching side, the kidney is still movable and the pelvis is locally irritated. If the patient must rest on the unoffending side the aching kidney is fixed and its surface is inflamed (Corticitis.) Intermittent diuresis marks some dilatation of the renal pelvis. Fenwick calls attention to the frequency with which small aberrant vessels are found entering the kidney. These aberrant vessels may pass to either the upper or lower poles of the kidney. If to the upper pole, and the kidney is slightly movable, the dragging of the organ may cause arterial anemia of the small area of kidney which this vessels supplies, with consequent corticitis (pain) and attacks of polyuria and thirst. Aberrant vessels running to the lower pole of the kidney are found in 16 per cent of all cases of primary pelvis dilatation, and in addition to the above symptoms, they cause dilatation of the pelvis by pressing upon the ureter. According to Fenwick, an aberrant vessel is the most common cause of kidney pain. Division of this vessel is attended by prompt alleviation of the hydronephrosis and its attendant symptoms.

Liver Logic.

In spite of the conclusions of some of the laboratory scientists that the biliary fluid is purely an excretion, devoid of physiologic action or effects, the practical physician appreciates the importance of its presence in the intestine, in normally sufficient quantities, during the period of digestion. It is a well established clinical fact that hepatic insufficiency begets hepatic torpor, and that a lazy liver results in biliary stasis. Such a condition, in turn, implies a sluggish flow of viscid bile and the intestine is thus deprived of its normal quantity of antiseptic, antitoxic, fat-emulsifying and physiologically laxative biliary fluid. The result is the putrefaction of proteids, the saccharo-butyric fermentation of carbohydrates, more or less fat indigestion, constipation, and finally, the constitutional absorption of the products of putrefaction and the development of an auto-toxemia of intestinal origin. This condition is responsible for the many manifestations of systemic posioning, such as Mental Dullness, Lassitude, Periodic Headaches and Neuralgia, Digestive Vertigo, Neurasthenia, Melancholia, Obscure Neuroses, etc. It is now, also, well appreciated that many eye, nose, throat and skin disorders are primarily auto-toxic in origin. Logical reasoning would seem to point to hepatic encouragement or stimulation as the primary indication in such cases. By virtue of its contained bile acid salt (sodium glycocholate) Tablogestin (Tablets of Tablogestin) is a true hepatic stimulant and cholagogue. Its normal (non-irritant) sodium salicylate (from oil of wintergreen) exercises its liquefying action upon the biliary fluid and also acts as an intestinal antiseptic. Its contained pancreatin (U. S. P. Standard) assists intestinal digestion generally, and the Sodium Bicarbonate tends to overcome any undue acidity that may exist. It will be observed, therefore, that the active ingredients of Tablogestin are so combined as to be mutually helpful in the relief of the conditions above referred to. Sample, formula and literature will be mailed to physicians upon request to F. H. Strong Co., 58 Warren St., New York.

Chronic Retention of Urine Without Mechanical Obstruction.

Rochet and Muller (Lyon Medical), describe a class of cases, usually men in the forties, who empty the bladder with difficulty and pass a catheter to secure complete evacuation of the urine, who present all the symptoms of a prostatism, and in whom the most careful examination fails to show any lesion which can explain the functional trouble. Treatment as a rule is quite inefficacious and even prostatectomy fails to relieve. In two such cases the authors made a small perineal section opening the membranous uretha. Through this opening the prostatic uretha and internal vesical sphincter were dilated until the finger could be introduced. This examination exhibited an indurated ring about the internal vesical sphincter. They attribute the retention to a precocious sclerosis affecting the vesical sphincter, which sclerosis is in turn due probably to a reflex from the focus of irritation in the prostatic uretha.

Therapeutic Effect of Oxygen and Alcohol Vapour.

Willcox and Collingwood (British Med. Jour.,) say that in combination of oxygen and alcohol vapour is a powerful cardiac stimulant in cases of heart failure. When the alcohol vapour is inhaled into the lungs with oxygen, it is conveyed direct to the heart, and all the alcohol absorbed by the blood passes immediately through the heart, so that the full effect of the drug is obtained on the only organ on which it is known to have a beneficial action. Moderate doses only should be given, for in large doses alcohol undoubtedly depresses the circulation. If given in the form of vapour with oxygen at ordinary temperatures, the amount of alcohol administered (1 to 2 grains per litre of oxygen) is so small that it is impossible to give an overdose. The exhibition of this combination is pleasant and non-irritating to the patient; no ill effects to the lungs or bodily system are produced. The good effect on the circulation is seen by the slowing of the pulse, with marked improvement in its force and volume, and by the rise in blood pressure. The full effect is not maintained indefinitely, and it is thus necessary to repeat the administration. Among the conditions likely to be benefitted are cases of pneumonia with cardiac failure, pleurisy, cases of heart failure following chloroform, anaesthesia and various surgical operations, angina pectoris, attacks of asthma with heart failure, septicaemia, typhoid fever, myocardial degeneration, dilatation of the heart, valvular leisons of the heart, collapse after epidemic diarrhoea, etc. The apparatus suitable for the clinical administration of the remedy is described.

Adrenalin in Cholera.

Drake-Brockman (Indian Med. Gazette) says that in cases of cholera, where the blood has been practically drained of its serum, the encouragement of vaso-construction appears to the author to be a scientific line of action. The system will be enabled better to utilise any saline infusion that may be given, and tendency to collapse will be avoided. The author gives injections of 5 minims of adrenalin chloride solution (1:10,000), which he finds to act as a charm, establishing the circulation and stimulating the heart, with the disappearance of cramps and other symptoms. Small doses, well diluted and frequently repeated, are better than large doses, and intramuscular injection is recommended. The Dr. considers that pituitrin is even better than adrenalin, but the latter is more easily attainable, being in nearly every hospital.

Chronic Nephritis.

In the Proceedings of the Royal Society of Medicine Brown criticizes some of the principles of treatment in chronic nephritis. The Dr. says that in Bright's disease we have probably tended to lay too much stress on the albuminuria. In the chronic parenchymatous form no doubt the drain on the albuminous constituents may become serious and a secondary anemia result. But such a high degree of albuminuria is uncommon, and he thinks that we are beginning to realize that this once symptom has unduly dominated our conception of the disease. Von Noorden thinks that any wasting is just as much explained by the monotonous diet as by the loss of albumin. The evidence that albumin (as for instance egg albumin) is ordinarily absorbed as such, and is able to "run through" the body will not really stand investigation. It is difficult to believe on theoretical grounds, therefore, that the albuminuria of nephritis can be influenced by the amount of albumin i nthe diet, and he has tested the point practically in a good number of cases of chronic nephritis. As regards urea excretion as a guide to the capacity of the kidney, he concludes that of our protein diet very little is used for direct repair of tissue waste, but doubtless much of the rest is used as a source of energy. It is at least probable that the ammonia groups set free from the protein excess are useful in neutralizing acids that might otherwise lead to acid intoxication. Too rigid a limitation of the protein diet with the idea of diminishing the albuminuria is bad, because it cannot effect the desired object, and deprives the patient of an essential form of nourishment. We can safely permit a much greater variety of diet than is allowed on the orthodox lines. For instance, he believes that eggs and things made with eggs may be certainly allowed, and it is undesirable to restrict such patients to milk which is too dilate a form of food for them and may increase the edema. Salt should not be allowed since it is badly eliminated in many cases of nephritis and, accumulating in the tissues, increases the edema by raising the osmotic pressure. Prolonged nitrogen starvation is as bad for a nephritic as for any one else. Nitrogen retention is a feature of acute nephritis and a diet poor in nitrogen is strongly indicated. This period of retention is usually short, if it continues it is very ominous. A few days of comparative nitrogen starvation will do no harm and may avert grave danger. There has always been a tendeny to regard flushing out the kidney as a good line of treatment in Bright's disease, but before employing it we should consider what method of diuresis we mean to employ, how far such methods are desirable in the case in hand, and how far they will achieve the end desired. Routine and indiscriminate "flushing out" is to be condemned.

Pancreatic Lesions in Diabetes.

At a recent meeting of the Medical Society of Vienna, Weichselbaum mentions the researches he has carried out on the development of the islands of Langerhans in the pancreas, and on his observation in 183 autopsies on patient's suffering from diabetes. The islands of Langershans have the same origin as the rest of the parenchyma of the glands, but do not develop in glandular parenchyma. They are regenerated, not at the expense of the parenchyma, but by proliferation of the small excretory ducts. In general the pancreas of the diabetic shows no macroscopic changes. Sometimes there is an

atrophy and sometimes a fatty infiltration. On microscopic examination, one generally finds a diminution in the number and volume of the islands. The microscopic change is of four kinds. In subjects under forty it consists in a hydropic degeneration which is followed by atrophy and then disappearance of the insular cells. In patients over fifty the change consists in a sclerosis of the islands and is generally accompanied by a sclerosis of the pancreatic vessels. A third type is shown by hyaline degeneration of the insular cells. It occurs at an advanced age, and is also accompanied by vascular sclerosis. In the fourth type there are haemorrhages in the islands often accompanied by regeneration or hypertrophy of the islands. According to the author such lesions are not found in any other condition except diabetes. The failure of many observers to discover such changes in diabetic cases is explained by the Dr. on the ground that in many cases there is only the hydropic degeneration, which may easily escape observation.

Acquired Pelvic Contractions in Relation to the Laws of Labor.

Fabbricatore (Giorn. Internaz. d. sci. med.) record has experiences in one of the provinces of Italy where he conducted an obstretric service among the poor people. There was no near railroad, and but few roads, but there was much large timber to be transported to the railroads. Much of the work of transportation of this timber fell to the lot of the women and children, who carried it on their shoulders and heads. This work was begun by the young girl before the bones were ossified, which does not occur until about the age of twenty. The consequence of this severe labor was a contraction of the pelvis, flattening, with narrowing, caused by the pressure of the weight upon the trunk. The forces which acted on the pelvis were three: the weight on the trunk, the counterpressure of the femora, and the resistances of the pubes. The pressure from above pushes the sacrum down and exaggerates its curvature. A torsion of the ilia occurs, with flattening of the whole pelvic cavity. The narrow and deformed pelves caused the necessity of frequent applications of the forceps in delivery, and many craniotomies were required. The Dr. did not do pubiotomy or symphysectomy because of the squalid surroundings in which the people lived. An added element in the causation of deformity was the poor and scanty food that these people ate. A labor law that regulates factory work will not prevent the effects of such severe labor by the women and children of the country.

A Peculiar Form of Reaction of the Uterine Mucosa as a Result of Artificial Placentation of Loeb.

Gasbarrini (Ann. di Ostet. e gin.) states that Loeb succeeded by making incisions into the uterine horns in causing an artificial formation of decided tissue in rabbits and guineapigs. The incisions were made two to nine days after ovulation, without the necessity of the fecundation of the ovule, or its contact with the uterine mucosa. While ligation of the tubes made no difference in these effects, extirpation of the ovary some time before the experiment prevented the formation of decidua. The doctor repeated the experiments of Loeb. He found that incisions into the uterus of rabbits caused decidual formation only when the operation was done after ovulation. This reaction occured ten days after the operation either at the site of the incisions or at some distance from them. When the ovaries had been removed the same effect was produced by injection of fresh ovarian substance dissolved in physiological salt solution. In rats in whom ovulation occurred a few days before the operation no reaction occurred. In the formation of the artificial decidua a secretion furnished by the ovary takes a part as a stimulant.

Tetania Gravidarum.

Frank (Monatschr. f. Geb. u. Gyn.,) describes as tetany of pregnancy a condition in the pregnant woman in which intermittent tetanic cramps attack the muscles of the extremities, face, larynx, etc. When severe they are very painful, and when the larynx is affected attacks of suffocation supervene. Trophic changes appear in the nails, hair, and skin. If pressure is made in the bicipital sulcus a typical attack of spasm begins; the galvanic excitability is increased; there is an increased irritability of the motor nerves; the nerves of sensation are more responsive to electrical and mechanical stimuli. The majority of such cases do not come to the obstetrician, but to the general practioner. This affection is usually recurrent in each pregnancy and in each successive pregnancy the violence and extent of the spasms is increased. Between the pregnancies the patient is entirely free from this trouble. It usually occurs in multiparae or in nervous, anemic persons. It appears in the latter part of the pregnancy. While the prognosis is generally good, cases have occurred in which death has occurred in one of the convulsions. The author does not believe that there is justification for the induction of premature labor in these cases.

Extraperitoneal Cesarean Section.

Russell in The London Practitioner, says that in cases of prolonged labor which have probably become seriously infected before they are seen by the obstetrician the ordinary method of Cesarean section is contraindicated, and the question arises whether any of the so-called extraperitoneal methods can be substituted in order to avoid or lessen the risk to the mother, while everything is done to save the life of the child. The doctor favors the mode of operation as described by Doderlein. The writer uses Pfannenstiel's transverse incision through the superficial layers of the abdominal wall, including the fascia; separation of the recti muscles in the middle line; filling of the bladder with a sterile solu-

tion through a catheter, which is kept in the uretha for further injection if needed, to define the contour of the bladder; deflecting the bladder with gauze swab; longitudinal incision of the cervix which has been uncovered in this way; and delivery of the child with the help of a short straight forceps. In completing the operation care is taken to gather up the loose connective tissue in the final stitching of the various layers so as to leave no dead spaces. In infected or very doubtful cases, drainage can be secured through the vagina, when the abdominal wound is closed, or by leaving a sterile or iodoform gauze packing between the uterus and the abdominal surface and only partially closing the wound. The operation may be described as complementary to the usual "classical" intraperitoneal operation. Though it has not fulfilled the original expectation of some that it would be available for undoubtedly septic cases, it may be risked in these cases when the ordinary intraperitoneal method would never be thought of, while it is sure to become an operation of choice in later stages of labor that cannot be completed naturally, in shoulder and other presentations when the position is transverse, and in cases of placenta previa where the child is likely to be viable.

Abdominal Exohysteropexy in Severe Displacements and Total Prolapse of the Uterus.

Solieri (Zeit. f. Geburts. u. Gyn.,) gives his experience with the use of the method of Spingaro, somewhat modified by himself, in total prolapsus uteri and severe uterine displacements. The doctor publishes six cases operated on by himself. The normal position of the uterus is almost horizontal, and retroversion is the beginning of the prolapse. The tubes and ovaries, either as a result of adhesions or of shortness of the ligaments, fall toward the center ot the abdomen and the fundus of the uterus and increase the mass of prolapsed tissue. Straining at stool and fullness of the bladder and bowels aid in making the descent worse. To this is added a relaxed condition of the ligaments and supporting muscles, and of the perineum, together with its rupture in multiparae. The author begins his treatment by keeping the patient in bed for five or six days with the uterus replaced; this allows the congestion and edema of the parts to disappear and puts the tissues in a better condition for the operation. The doctor opens the abdomen in the middle line, below the umbilicus, and draws up the uterus, resects the tubes between two ligatures, thus lessening the size of the mass to be retained, and insuring sterility. The writer then draws out the uterus and sews the peritoneum snugly about it before fixing that organ to the abdominal wall. At the same sitting he does a plastic operation for the repair of the perineum, and to decrease the size of the vagina, cystocele, and rectocele. The remote results of this operation have proven to be excellent as far as the author's cases are concerned, some of which were done as much as two years ago. Some of these patients are able to have connection normally. No bladder troubles have been left behind. The author states his belief that combined perineal repair with exohysteropexy is to be recommended in prolapse of the uterus with cystocele and rectocele, and in severe cases of retroversion or torsion of the uterus. It is desirable to combine these operations at the same sitting. The cutting of the tubes between ligatures and anchoring the uterus under the skin of the abdomen produces a firm and durable fixation of the organ. The possibility of a separation of the abdominal muscles and hernia is avoided by a careful suturing of the walls. It is advisable to avoid placing the sutures in the vicinity of the uterine arteries so as to prevent bleeding into the abdomen. Both immediate and remote results of the operation are good.

Hematoma of the Ovary.

Hedley (Jour. Obst. Gyn. Brit. Emp.,) records eighteen cases of hematoma of the ovary, ten of which he has seen within eighteen months. The doctor defines this condition as one in which the ovary is enlarged and contains fluid resembling old altered blood of a brown color and oily or tarry consistence. It is a disease of the child-bearing period of life in the great majority of cases. The youngest patient in this series was twenty-four and the oldest fifty-three; with these exceptions all were between the ages of twenty-eight and forty-eight and eight were unmarried and had never been pregnant. The average number of pregnancies among the married women was only 1.2. Hematoma of the ovary, and apparently the conditions which lead to it, are associated with a marked diminution in fertility. Menstrual disturbances of various types are common with hematoma of the ovary. Pain was the most prominent symptom in all but two of the patients. In seven the first symptom was a sudden severe attack of pain usually in the lower part of the abdomen accompanied in some cases by vomiting, retching or fever, followed by frequent or occasional ones of the same character at intervals varying from a few days to several months, or by severe dysmenorrhea or a continuous dull aching pain. In three cases the pain first came on at the periods and recurred at subsequent periods; in one of these, after some months of dysmenorrhea, the pain became constant. In the remaining six cases the patients complained of a persistent dragging pain in the lower part of the abdomen and back. The physical signs produced by hematoma of the ovary vary with the size of the collection of altered blood and the thickness of its surrounding wall, with the acuteness or chronicity of the inflammation and with the amount of peritonitis and cellulitis around the affected ovary. Many of the patients complained of tenderness in one or other iliac region or over the whole of the lower part of the abdomen. In some cases semi-solid tumors could be felt. Tenderness was acute in three cases, and the abdominal wall was held rigid over the tender area. On bimanual examination in all these cases, with

the exception of three, in which the uterus was enlarged by fibromyomata, swellings, varying from the size of a hen's egg to that of a cocoanut, were found in the pelvis. The fixation of these masses was a striking feature in all but two of the cases; in four the tumors could be moved to a slight extent, and in the remaining nine they were markedly fixed. In four cases there was evidence of inflammation of the pelvic cellular tissue. A hematoma of the ovary is always firmly fixed to surrounding structures by peritoneal adhensions. The disease may involve both ovaries or only one; in nine cases of this series the condition was unilateral, and in six bilateral, while in the remaining three both ovaries were probably affected. In six cases there were uterine fibroids. There seems no reason to doubt that the actual process of formation of ovarian hematoma is one of rupture of several or many Graafian follicles into one another, instead of on to the surface of the ovary separately.

Adenomatosis Vaginae.

Bonney and Glendining (Proc. Roy. Soc. Med) records what they believe to be a unique case. The patient, a woman of forty-two, had had five normal labors, the last eight years ago. Menstruation was normal. For twelve years she had had a continual transparent sticky vagina discharge. The entire vaginal mucosa, including the vaginal surface of the cervix, was of a singular red color, and had a granular, finely honeycombed texture. It was studded all over with small cysts from the size of a pin's head to that of a large pea, and from it poured a continuous stream of mucosa fluid. The vaginal mucosa was covered with stratified epithelium reduced in many places to the thickness of a single cuboidal cell. Imbedded in the subjacent fibro-muscular stroma were numerous glands lined by a single layer of actively mucinogenetic tall columnar epithelium. Some had been converted into retention cysts, others communicated with the surface of the vaginal muscosa. He discusses the possible origin of the glands from the ducts of Muller, from the Woffilan tubes, or by metamorphosis, inflammatory or reversionary. They believe that in this patient a congenital peculiarity of the cells lining the vagina existed, in virture of which they possessed facultative gland-forming powers similar to those covering the vaginal cervix in immediate proximity to the external os; and that this power lay dormant until activated by an excitant, probably inflammatory and connected with child-bearing, the process being analogous to that by which a glandular erosion of the cervix is formed.

Inconveniences and Dangers of Cow's Milk From Animals Nourished With Industrial Residues.

Aviragnet (Arch. med. des enf.,) gives the results of clinical experimentation on the use of milk of cows nourished with industrial residues of various kinds. It has been found that such milk is capable of producing, in children nourished on it, intestinal troubles which are very rebellious to treatment and run a fatal course if this milk is continued, but that are cured at once when the milk is stopped and a milk from some healthy source is substituted for it. The analysis of such milk shows no difference in composition from that of normal milk, yet the results of feeding show clinically that there is a difference. This difference depends on the presence in this milk of the poisonous products of fermentation which pass into the milk and affect the intestines of the infant. We know that even sterilized milk is not free from these toxins and causes similar intestinal trouble. Such experiences are similar to the intestinal troubles of infants which occur when the cows are first put out to pasture in the spring. Several kinds of residues from industrial pursuits are used for feeding cows. They are pulp from beets used in the manufacture of sugar; brewer's waste, from the various grains used in the production of beers; waste from distilleries of alcohol; and residue from oil factories. The pulp of beets contains sugar and a large amount of water, and hence ferments very readily. It has an extremely bad odor when kept for any length of time, and contains many products of fermentation. The pulp from distilleries is caid from the use of sulphuric and other acids used to prevent lactic and butyric acid fermentation. They cause diarrhea in the cows, and also in the children fed on their milk. In distilleries the grains are fermented by diastase or acids. They contain much water, and nitrogenous principles. Oil cakes are made from the residue of grains and fruits from which oil has been expressed. In herds of cows fed on distillery waste tuberculosis is frequent. It causes functional intestinal diorder, skin troubles, weakness and fever, resulting in death unless cathartics are given and the food stopped. It is the toxins contained in these residues that are responsible for the bad effects on infants and also adults. It is known that frequent abortions occur among cows fed on beet pulp, and lambs fed on milk from these cows have a form of progressive weakness, ending in death It is claimed by the producers that fresh residues have no bad effect on the milk, but experience shows that the bad effects, while less than those of old residues, are still present. Milk from cows fed on brewers' grains appears normal, but its taste is bad and the odor unpleasant; when boiled the milk becomes yellow, has a gruelly sediment, and is unpleasant in taste and odor. In infants this milk causes malnutrition, emanciation, intestinal catarrh, vomiting, fetid stools and fever. Stopping this milk immediately relieves the condition. It is the opinion of Marfan T. Variot and others that all these residues should be forbidden as food for cows which are to produce milk for the feeding of infants.

Scarlatinal Cirrhosis, Does It Exist?

Barnard (Tribune med.) says that the existence of a cirrhosis due to scarlatina has

been much discussed and by many authors is denied. It has been said that in every case of cirrhosis we must eliminate three factors, syphilis, tuberculosis, and alcohol, before we take up that of scarlatina, and that it is almost impossible to be sure that any given patient has never had any of these three factors. He describes a case in a woman of forty-seven years of age, in whom it was almost absolutely certain that syphilis, tuberculosis, and alcoholic excess were absent. She had scarlatina at the age of twenty-four years, and lost two of her children at that time by the same disease. She had a marked atrophic cirrhosis when seen. In this case it seems more logical to ascribe the cirrhosis to the infectious disease, than to another disease that was probably absent. The doctor goes over the cases of cirhosis reported after scarlatina, and draws attention especially to one that occurred in a child of nine, who at the same time that her brother had a true scarlatina, had an angina, followed by digestive derangements and icterus. She died after about six months, and autopsy showed annular perilobar sclerosis, with conjunctive penetration between the trabeculae, as is seen in hypertrophic cirrhosis. This case was reported by Bingel, who thinks that it is the parenchyma of the liver that reacts to compensate necrosis due to the disease, and thus we get cellular hypertrophy, nodular hyperplasia, and nodules in mitosis. Scarlantinal cirrhosis is a simple alteration of the parenchyma, with an interstitial reaction, a degree further advanced than that of the ordinary changes seen in the disease. Between the hepatitis that is ordinarily seen and the cirrhosis there is a differenc only in th intensity of the lesions. In actue hepatitis we see cellular alteration and leucocyte infilteration; periportal infiltration, perilobular and triangular penetration of the connective tissue represent the first stages of cirrhosis. There is no especial typical scarlatinal cirrhosis, but this infectious disease causes the same sort of changes as do syphilis and tuberculosis. A period of hepatitis is followed by one of cirrhosis when the process continues beyond convalescence. The end is cachexia, ascites, and death.

Pathology of the Thymus.

Marfan (Arch. de med. des enf.,) says that the location of the thymus causes it to exercise pressure on important organs in cases of hypertrophy. It is enveloped in a thin membrane adherent externally to the neighboring structures, but loosely connected with the organ itself, so that while total ablation of the thymus is a difficult operation, enucleation is easy. Early in intrauterine life it appears as two tubes of epithelium arising from the third branchial cleft. It increases in size up to birth, and remains of some size up to two years of age, when it gradually atrophies. At birth it is a hemolymphatic gland. Its period of full activity is during the first months after birth. It increases in size in a number of diseases, especially the various infections. The most common lesion is a simple hyperplasia of the elements of the gland resulting in hypertrophy. The cells become increased in number and thus the whole organ enlarges. In many cases there is a marked hyperemia. Congestion plays an important part in the accidents connected with the thymus. All the infectious diseases, diphtheria, erysipelas, variola, measles, and infectious purpura cause hypertrophy of the thymus. The chronic infections, such as tuberculosis and syphilis, determine hyperplasia of the gland. Its hypertrophy frequently accompanies rachitis. Dr. Marfan believes that hypertrophy of the thymus and rickets have a common cause, chronic infection or intoxication. Hyperplasia of the thymus is seen in simple and in exophthalmic goiter, myxedema, acromegaly, Addison's disease, tetanus, etc. It is seen in cyanosis from congenital malformation of the heart. With hypertrophy of the thymus the child has attacks of congestion which cause compression of the trachea and other organs beneath it. These symptoms are found under usual conditions only during the first two years of life. Sclerotic atrophy may be seen much less frequently. Other lesions of the thyroid may be mentioned, abscess, tuberculosis, syphilis, neoplasms, apoplexy. The hypertrophic thymus may cause symptoms in ways, by causing compression, and dyscrasia or toxemia with hypertrophy. The doctor believes that by percussion he can map out accurately the location and size of the thymus. Radioscopy and radiography give a shadow of the gland that is elongated and bottle-shaped. When hypertrophy occurs the shadow enlarges and becomes more opaque. The value of this means of diagnosis is very great. Dyspnea is a common occurrence in hypertrophy of the thymus. It may be chronic with paroxysms, or acute and rapidly fatal. The stridor is heard in both inspiration and expiration, but is more marked in inspiration. The larynx pressed upon by the gland does not descend in inspiration. In the chronic form paroxysms appear without appreciable cause, or may be brought on by anger, crying, or hyperextension of the head. One peculiarity of this dyspnea is that it is not relieved by tracheotomy or by the introduction of a short tube, but may be relieved by a long tube which descends below the gland. The voice is not affected in this form of dyspnea. Bronchitis is frequent in these children. The gland some times causes asphyxia in the newborn. All the symptoms mentioned arise from compression of the trachea by the gland. Autopsy has shown the trachea flattened by the gland. A partial or total extripation of the thymus has at once relieved this dyspnea, and tracheoscopy has shown a flattened trachea. Vascular compression may be shown by turgenscence of the veins of the neck, blnish color of the face, and tension of the anterior fontanelle. Sudden death has been caused in this condition by syncope, preceeded by nervous phenomena, dyspnea, and cyanosis. It may occur in the midst of surgical anesthesia. Dys-

pnea may be chronic, in the form of congenital stridor, it may be paroxysmal, with periods of normal respiration between, and it may occur suddenly with rapidly fatal results. Treatment includes radiotherapy in chronic cases; surgical extirpation when there is time for such operation; and introduction of a long tube when dyspnea is urgent.

Patenting of "606."

Some of our contemporaries are contrasting the circumstances under which arsenobenzol has been put upon the market with the conditions that attend the launching of similar innovation in this country, pointing out that, under the former arrangements, Professor Ehrlich derives a pecuniary profit from his discovery which the ethics of medicine in this country denies to an American discoverer or inventor. All of which, the contemporaries to whom we refer think is indicative of the superior sense of the German, who does not allow a foolish sentiment or tradition to stand in the way of his reaping the fruits of his labors.

* * *

We are not so sure that we altogether agree in this view of the matter. We believe that the principle which forbids the medical man to patent or copyright his discoveries and inventions for the relief of suffering rests upon more than a mere consideration of local ethics. That there might be, and ought to be, exceptions to the rule, we very readily admit. There are many originators of useful devices and remedies who are really needy, and to whom one would begrudge, on any ground, a modest profit from their valuable contribution to medical equipment There are also discoveries and inventions which are in the nature of luxuries, rather than necessities, for the sick; and for these there is no good reason why the people using them should not pay a reasonable toll. But the discovery and promulgation of a remedy or an apparatus which is in the nature of it a necessity in the treatment of certain diseased conditions should, we think, respects the principle of ethics which demands its free donation to the public. If the originator be poor or needy by reason of the work that he put into his discovery, then some other way can be found to recognize his service to medicine; but we cannot subscribe to the policy of putting a tax upon a necessity in medicine and surgery by members of the profession.

* * *

Quite apart from this question of profit, however, we feel that Professor Ehrlich and his advisers have committed a tactical and ethical blunder in permitting arsenobenzol to be introduced in this country as a patent medicine under a popular trade name—especially under a name which imitates, if indeed it does not actually infringe, that of a widely-known nostrum sold by a patent medicine manufacturer of this country for the same purposes as arsenobenzol. We are perfectly ready to believe, of course, that Professor Ehrlich was animated by a legitimate and commendable desire to keep the identity and integrity of the remedy under his direct control. But we think that some other and better way of doing so might have been found than that which has been adopted. We are also free to admit that Professor Ehrlich and his associates are their own masters, at perfect liberty to handle their own business in their own way. But we are a little surpised that organized medicine in this country did not bring advisory influence to bear upon the matter to prevent such a mistaek being made. We trust something will yet be done to correct the blunder.—Medical Standard.

Treatment of Ringworm of the Nails.

Low in the Edinburg Medical Journal, discusses the fungus infections of the nails, which he classifies into three groups, viz: (1) ringworm of the nails; (2) favus of the nails; (3) a fungus infection of the nails of unknown origin. The treatment of these cases presents some difficulty. The easiest method is to keep the nail covered with an india rubber finger stall after applying ointment of ammoniated mercury night and morning. The softened nail is scraped away every day. In the majority of cases this method is ineffectual. A better method is Harrison's, in which, in addition to the regular daily scraping, a solution of potassium iodide, zi in solution of potassa and distilled water, aa zss, is applied for half an hour on a piece of absorbent cotton. It is then removed, and for the rest of the twenty-four hours a solution of corrosive sublimate, gr. iv in alchol, and distilled water, aa zss, is applied on lint and the finger covered with an india rubber finger stall. These applications are repeated daily till the nail becomes black and so soft that it can be removed.

The Dr. refers to a new method devised by Walker. The Dr. applies Fehling's test solution on lint to the nail, covers it with a finger stall, and leaves it on for a day or two. At the end of that time the whole nail is so soft and pulpy that it can easily be removed by forceps. After the nail is removed a solution of copper sulphate, gr. x, in water zj, is used as a continuous dressing. With this method good results were obtained in some of

Cosmetic Treatment of Facial Paralysis.

Mombur̈g (Berliner Klin. Wochenscb) has successfully performed a modified Busch operation in a number of cases of facial paralysis. A small horizontal incision is made over the zygomatic arch down to the bone, and a needle carrying fine aluminum bronze wire passed around it; next two small incisions are made at the angle of the mouth, the one close to the angle and the other further toward the median line. The wire is then passed from the zygoma beneath the skin through the soft part of the cheek as far as the medium incision in the lip, and then to the more lateral incision, returning to the zygoma. In this manner a loop of wire is secured by means of the cases; but whatever method is used long and painstaking treatment is essential for a successful result. When the disease is cured the nail grows in again without any deformity.

which the paralyzed angle of the mouth can be drawn upward. After the necessary correction has been made, the ends of the wire are twisted and the cutaneous wounds closed.

Should Gonorrheics Marry?

Should gonorrheics marry? That depends upon just what is meant by the term "gonorrheic." If it includes only those individuals who are actually suffering from gonorrhea in some stage of the disease—acute, subacute, or chronic—there can be but one possible answer. Such victims of their indiscretions should most emphatically refrain from marriage until free from the disease. Should they contract a marriage before this event, they are morally, if not legally, criminal, and the sickness or death of the woman so married resulting directly from venearal infection of the pelvic organs should be laid at the door of the guilty party. The view held by some extremists that the term "gonorrheic" should embrace all individuals who are having or have had the disease at a more or less remote period cannot be accepted by us. Such a contention admits at once a belief in the incurability of gonorrhea—a view which we are not willing to accept in the light of our present knowledge of the disease. As far as womankind is concerned, there is a very grave doubt as to possibility of an absolute cure. This danger is vastly increased if the gonococci have found lodgment in the uterine cervix or upper portion of the generative canal. In men, probably the great majority of cases of gonorrheal infection end in an absolute cure, without resultant stricture or other apparent ill effect. A small percentage, comparatively speaking, remain uncured, and are constant menaces to those with whom they are sexually intimate. No man, then, who shows the slightest amount of urethral discharge even amounting to only a slight gluing of the lips of the meatus, should entertain the thought of marriage until his every symptom has subsided for months or years.—Indian Medical Record.

Cyclic Vomiting in Children.

Comby (Arch. de Med. des. Enf.) gives details of 104 cases of recurrent attacks of uncontrollable vomiting in children. The attacks last for one or several days (the patient being apparently well in between), and are found in children generally between the ages of two and six years. The sexes are affected equally, 50 of the author's cases being boys and 54 girls. In 6 cases two or three members of a family were affected. In 62 there was a neurotic and gouty family history. Dyspepsia or some infectious disease frequently preceded the onset of the vomiting, but appendicitis was one of the commonest antecedents. Ten cases were fatal, and in these fatty degeneration of the liver and gastrointestinal lesions were found. The attacks come on suddenly with constipation and great prostration. Vague abdominal pain is sometimes complained of. The temperature at times is high, but is not always raised. Comby found appendicitis in fifty of his cases, and he regards appendicectomy as the best means of stopping the vomiting. Treatment consists in giving alkalies to contract the evident acid intoxication, and during an attack lavage may arrest the vomiting. The author further advocates the administration of powders containing .25 gram each of calcined magnesia, benzonaphthol and sodium bicarbonate with .01 gram of powdered nux vomica twice a day for ten days at a time. The vomiting recurs every month in some cases, and in others at longer or more irregular periods. A sweet or acid odor of the breath is present just before or during the attacks.—British Journal of Children's Diseases.

Psychoses in the Course of Organic Heart Lesions.

Saathoff (Meunch, med. Woch) says that chronic psychoses do not often develop in the course of simple valvular lesions, but acute psychoses occur very frequently with failing compensation and generally disappear when compensation is reestablished. Delirium, somnolence and disturbances of sensibility occur simultaneously with the disappearance of edema of cardiac origin, probably as a result of absorption of toxic substances, Hallucinations are common in acute endocarditis.

The Dr. has seen two cases of aortic insufficiency of syphilitic origin in which acute psychosis developed shortly before the and. In both cases the necropsies revealed dilation of the aorta with shrunken aortic valves, atrophic changes in the brain and secondary hydrocephalus. Psychoses are common in aortic aneurysms.

Dr. Saathoff lays stress on the fact that syphilitic individuals with heart lesions are especially prone to mental disturbances when compensation fails, as the brain is damaged by the toxins of syphilis.

Tuberculosis of the Bladder.

In a case of advanced vesical tuberculosis, in which the most powerful local measures had failed to relieve the constant pain and tenesmus, and the patient was rapidly falling into a state of cachexia, the author succeeded in procuring relief without performing a radical excision of the organ. The bladder had already been entered twice by suprapubic incisions, and on several occasions from the perineum, without improvement. Extensive tuberculous lesions, together with calculi, had been found. A sound was introduced through a perineal incision, and the bladder opened widely from above and packed. No effect was produced on the symptoms. The packing was not well borne, and was replaced by a tube; but this also had to be removed at the end of three weeks. A bilateral lumbar nephrostomy was then contemplated, with total excision of the bladder as a secondary procedure. At operation the right kidney

was found extensively diseased and was removed. The left kidney appeared normal. A sound was then introduced through the incised ureter, pushed in toward the inferior calyx, and its external end immersed in a receptacle containing an antiseptic fluid. The operation was not followed by a rise of temperature. The pain disappeared completely and the tenesmus relieved, owing to the fact that the urinary flow had been diverted from the diseased area. Two weeks later the sound was removed, a satisfactary lumbar fistula remaining. The general condition rapidly improved, the patient gaining 20 kilos (44 pounds) in weight in five months. Excision of the bladder was no longer necessary, and cure of the tuberculous process in this organ appeared probable. The author recommends that in similar cases nephrostomy be performed. Willems in Clinique.

Miscellaneous.

Epithelioma of the Tongue.

Caird in The Edinburgh Medical Journal says that epithelioma of the tongue is peculiar to the male sex, rarely attacking women. It begins as a local induration, or a hard elevated area, on the lateral border of the tongue where there may already exist a crack or fissure. The covering epithelium gives way, an ulcer forms, and a most characteristic pain, referred to the ear and to the temporal region, annoys the patient, so that he frequently appears with cotton wool plugging the ear. Enlargement of the lymphatic cervical glands speedily ensues. If the trouble is situated near the root of the tongue, or if it spreads to the floor of the mouth, the greater is the inconvenience felt by the patient in the form of discomfort or pain when chewing, swallowing, and speaking. There may be a copious flow of saliva, and the breath acquires an offensive odor. Difficulty in protruding the tongue is experienced, according to the fixation and involvement of the organ. Antecedent irritation has long been recognized as at least predisposing to the development of carcinoma. The laity are prone to cite local irritation of some kind, chiefly that from carious or jagged teeth, as the main source of this malady. Of the Dr's. sixty cases twenty-seven ascribed the disease to this cause, although one patient was convinced that induration appeared prior to the dental irritation; eighteen already had the offending tooth extracted, and thereby thought some amelioration of pain ensued; four had the projecting angles of the tooth filed smooth; seven came with the offending tooth in situ; three blamed a badly fitting artificial denture; two were satisfied that the malignant ulcer arose at a point facing that where they held the tobacco pipe; three had made a rather prolonged use of caustics for apparently simple conditions; and one had scalded her mouth with porridge eight weeks before the epithelioma developed. Thus thirty-eight gave a definite account of an antecedent local irritation. Among the fifty four male cases it is interesting to find that not one is chronicled as a nonsmoker. The pipe was used by twenty in moderation, eleven to excess (over two.) The habit of smoking was abandoned as the disease advanced. One patient occasionally obtained relief by smoking, but as frequently the reverse. In regard to alcohol three patients were total abstainers, fourteen drank to excess, eight in moderation, and of fifteen there was no definite information. In no patient were syphilitic manifestations discovered, and only four males acknowledged infection. Leucoplacia was only noted three times as occurring on the tongue and cheeks. Nineteen patients could give no history of any antecedent irritation. Of the six females three blamed jagged teeth, one irritation from a tooth plate, and one had scalded her tongue with hot porridge.

Powdered Silver Nitrate for Open Wounds.

Barnet, of Berlin, recommends the use of powdered silver nitrate as a means of exciting the proliferation of granulations and the regeneration of epidermis over open wounds and ulcers. As an excipient he uses fuller's earth. The latter should be sterilized by heating to 100° or 150° C., which increases also its hydroscopic properties. The mixture should be used in the proportion of 1 part of silver nitrate to 99 parts of the earth. It is dusted on the raw surface, care being taken not to let it extend over the parts already healed over, and renewed every second or third or fourth day according to the amount of secretion and reaction of the tissues. When the wound is well on the way to epidermization it is recommended to interrupt the treatment from time to time and apply a simple aseptic dressing. The author has employed the treatment in a large number of cases, and recommends it especially for burns and for the healing of wounds following furuncles and other infective processs of the skin.—The Hospital Journal, London.

Radiotherapy in Affections of the Spinal Medulla.

Marinesco presents the results of his study of the treatment of affections of the spinal medulla by means of radiotherapy. He

treated in this way three patients suffering from sclerosis in plagues, the rays being used over the cervical region and on the lumbar region, for 7 to 10 minutes. There were no skin effects in any of the patients. He got good results in one case in relation to motor disturbances, tremor, scanning speech, spastic gait, and disturbances of urination. The painful spasmodic contractions experienced at night were lessened. There are many facts with reference to animal experimentation and treatment of human beings that go to show good effects of radiotherapy in nervous diseases. The effect of the rays on young immature cells is remarkable. Some fragile cells in the young when the adult age is reached become indifferent to the rays. In some tissues they produce a proliferative action. The constant influence of the rays on all adult tissues and their karyokinesis is known. In nerve, gland, and muscle cells the activity of multiplication is reduced. Most of the inflammatory diseases of the spinal medulla are amenable to radiotherapy. In acute affections in which the nervous parenchyma is already altered radiotherapy cannot give good results. But in subacute and chronic diseases, and in certain tumors, great service is rendered. Aside from the diseases in which the rays destroy pathological elements, such diseases as sclerosis, Aran-Duchenne atrophy, etc,, they are valuable also where they are used to stimulate altered nutrition of nervous elements.—Annali di Elettricita Medica e Terapia Fisica.

Malignant Disease of the Nasal Passages Its Diagnosis, Pathology and Treatment.

Stuart Law states that malignant disease of the nose may begin outside the nose (extrinsic origin); in its early stages the disease may appear in unusual and obscure forms; and if operated upon in time is often readily amendable to cure. The extrinsic forms are most apt to be confounded with cysts of the antrum (mucocele) and dental cysts. Sarcoma is the form of growth most frequently met with in the interior of the nose. Nasal polypi may become sarcomatous. Carcinomata consisting of squamous cells originate usually in the ethmoid region. Those inheriting thin mucous membranes are most liable to cancer. Carcinoma is more common in the anterum than in the frontal sidus. The author states in conclusion that there are some practical lessons to be learned from a study of this subject: 1. Pain is not to be relied upon as an indication of malignant disease in the nose. 2. Increasing and persistent stuffiness, especially if unilateral, is an important point as regards diagnosis. 3. Recurring and increasingly severe hemorrhage, especially if unilateral, is always a suspicious symptom. 4. A combination of hemorrage and increasing stuffiness is often a serious indication of new growth existing. 5. The making of an early diagnosis is of great importance. 6. It is imperative to make a thorough and systematic examination in all obscure cases of nasal disease, and to remove early a piece of any obstruction in the nasal passages for a pathological report. 7. It is of great importance when there is malignant disease to operate as soon as poesible after a diagnosis has been made to secure a successful removal. 8. It is advisable to adopt the canine-fossa route in operating for the extirpation of intranasal tumors. 9. Innocent and malignant polypi are likely to coexist.—The London Lancet.

Crepitation in the Third Left Intercostal Space in Some Cases of Mitral Stenosis.

Cunnington in The London Medical Lancet, says that in a large proportion of cases of mitral stenosis crepitations are heard in the third left space. The area over which they appear is scarcely larger than a penny placed over the third space close to the eternal margin. Rarely it extends down to the fourth or up to the second space. The crepitations disappear when the breath is held. They are heard only on inspiration, and are more frequent in women; but mitral stenosis is more frequent in women, anyway. They may be present on a given day and absent on another, and are more liable to be present when the heart is distended. They have been found when the compensation is apparently perfect. These sounds forms sphacelotoxin. The percentage of sphacelotoxin varies accurately with the physiological activity of different specimens of ergot. Fluid extract of ergot. Fluid extract of ergot deteriorates so rapidly that even under the most favorable conditions there is a loss of strength approximating 10% a month, and if the drug is exposed to the air, the loss is even greater.

Late Results of Transplantation of Veins into Arteries.

Carrel (Glasgow Medical Journal) says that in his experimental work in the substitution of a segment of a vein for a portion of an artery excised, it has been shown that the vein reacts to its new conditions by undergoing a process of thickening proportionate to the increased intravascular pressure. Five to eight months after the anastomosis there was neither shinkage nor dilation of the implanted segment of vein, which, becoming white in color as contrasted with its original bluish tinge, has now

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"The Inhibitory Action of Listerine," a 128-page pamphlet descriptive of the antiseptic, and indicating its utility in medical, surgical and dental practice, may be had upon application to the manufacturers, Lambert Pharmacal Co., Saint Louis, Missouri, but the best advertisement of Listerine is . . . . . .

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acquired walls of thickness equal to that of the arterial walls. These results have been confirmed by many other workers. The operation has been carried out twice in men, once successfully.

It is clearly an advantage to use the patient's own tissue in preference to "grafts" which have been preserved in cold storage. Great stress is laid on aseptic technique, as the slightest trace of infection will spoil the operation. There should be no visible reaction in the adjoining tissue, and no leucocyte infiltration round the silk threads. Carrel differentiated degrees of non-suppurative infection to an extent not generally recognized, since they may be present when a wound is healing quite satisfactorily.

Perfect hemostasis both in the case of the artery and in the surrounding field must be effected, since coagulating blood liberates substances which tend to produce coagulation.

End to-end anastomosis is preferred, and when the technique detailed is closely followed one obtains a cicatrix almost invisible, showing very little thickening and without any danger of a formation of a parietal thrombus.

There is no late yielding of the scar, and so one is enabled to study it after the lapse of a long time. Sections show thickening of the media of the vein and union to that of the artery without the interposition of cicatrical tissue. Carrel has many such sections obtained up till sixteen and twenty months after the performance of the anastomosis.

Stich considers that there is an increase of the muscle cells. This increase or hypertrophy is followed by a sclerosis and a disappearance of the fibers—an experimental demonstration of the ideas long held by Adami on the subject of arteriosclerosis.

It remains to be seen whether after three or four years the transplanted vein will not actually becomes degenerated, atheromatous.

The increase in the blood tension apart from any intoxication may well produce a true atheroma. Carrel thus produced an experimental atheroma, only the portions of artery used had been previously weakened by cold storage.

Up till twenty months, then, it is proved that there is excellent adaption to its new functions by the implanted vein, and only time can show whether it is preferable to transplant arteries which have been artificially preserved.

Bronchial Obstruction.

Notwithstanding the great number of cases of foreign body in the bronchi reported, in but very few, the author finds, has an accurate note been made of the physical signs in the lung in an early stage of the illness. The body generally passes into the right bronchus because it is more vertical and slightly larger than the left. The changes are unilateral, serious and progressive. The following are the most important evidences, according to the author, of this condition, and in any suce case a bronchoscope should be passed in order that a positive opinion may be formed: 1. History of swallowing something immediately before the onset of severe dyspnea and cough. 2. Not infrequently a whistling or wheezing sound which patient can localize to one side, varying in quality if object is not fixed in bronchus. 3. Great distress, with not infrequently a constricting pain behind sternum, made worse by movement. 4. Dyspnea, with varying exacerbations, often intense and made worse cough, though sometimes only elicited by exertion. After a time there may be no distress. 5. Absent or, rarely, very noisy breath sounds with some slight diminution of voice and tactile vocal fremitus limited to one side of chest. 6. At first resonance on affected side, soon consolidation with dullness, and, after a time, signs of cavities and simulation of phthisis; occasionally hyperresonance. The physical signs sometimes vary from time to time. 7. With X-rays, defective movement of diaphragm and of thorax, alteration in density of lung, and not infrequently outline of foreign body itself. 8. Delay in commencement of inspiration as compared with other side. 9. Defective movement with consequent diminution in size of affected side. 10. Violent paroxysmal persistent cough, apparently most marked when the object is at the bifurcation, as sensibility of mucous membrane is greatest here. 11. Early pyrexia, which later becomes hectic, associated with chills. 12. After a short time an expectoration more or less profuse, purulent, often bloody, and later often fetid. 13. Sometimes nausea and vomiting, which may be very troublesome. 14. Pneumonia often developes in forty-eight hours; it may be septic and may be followed by gangrene. Pitt in The London Medical Lancet.

Momburg's Artificial Anemia.

Burk (Beitrage zur klinischen Chirurgie) states in reference to Momburg's artificial anemia that it is practicable only in those who have a healthy heart and whose strength has not been too much reduced, because this procedure, partly in applying the constriction and partly in removing it, may produce dangerous reduction of blood-pressure. This method is to be avoided in old people and those having arteriosclero-

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sis. In very fat individuals in whom in spite of strong pressure the femoral pulse cannot be made to disappear, the method is not applicable because it will not control bleeding. In very much emaciated persons, or in such as have ulcerative or chronic inflammatory disease of the intestines, the method is not practicable since there is danger of severe injury to the intestines from the pressure of the rubber tube.

Whether and in what cases the danger of ischemic paralysis of the conus terminalis, as observed in one case by Pagenstecher, constitutes a contraindication must be determined by future investigation.

Technic of Drainage of the Abdominal Cavity.

Fabricius (Zentbl. f. Gynak.) says that he looks upon purulent peritonitis in much the same light as an abscess, and therefore urges wide incision without suture of the wound and irrigation of the abdominal cavity. The Dr. believes it better to wipe out the pus with gauze compresses and to tampon the suppurating areas with large sterile gaze strips, which are left protruding from the abdominal wound. The external dressing consists of an abundance of sterilized cotton. Partial suture of the abdominal wound is done only in cases of tamponade for hemorrhage. Even when draining through the vagina, suture of the peritoneum is omitted, as this was found to afford no reliable protection against infection. Longitudinal incision is preferred to the Pfannenstiel method in the presence of purulent processes. In serious cases of pelvic disease reliance is never placed upon vaginal drainage alone, but this is supplemented by tamponing the pelvic cavity with gauze strips, which are passed outward through the abdominal wound, which is left open. This method has been employed by the author since fourteen years with excellent results.

A New method of total Removal of the Tongue.

Spischarny (Archiv f. klin. Chir), says that this consists in a preliminary suprahyoid pharyngotomy. A lateral incision is made as far outward as possible, to permit of the removal of any affected cervical lymphatic glands, and this is supplemented, if necessary, by longtitudinal incisions along the sternocleidomastoid muscle. After removal of the affected glands, both lingual arteries are ligated and divided, and the hypoglossal nerves also severed. If the cancer involves the floor of mouth, both the submaxillary glands and lymphatics are removed. The root of the tongue is then separated close to the hyoid bone, and the pharynx opened. Through this incision, the tongue, as well as all cancerous structures in the mouth and pharynx, are dissected out. After this has been done, the buccal cavity is laid open from in front, the mucous membrane at the floor of the mouth divided by an incision along the inner surface of the lower maxilla any muscular bands still connected with the tongue severed, and the entire new growth then removed either by way of the mouth or through the pharyngeal incision.

The Use of the Murphy Button in the Large Intestine.

Muhsam (Deutsche Zeitschrift fur Chirurgie) states that the Murphy button is a suitable and proper instrument for the establishment of an anastomosis in the large intertine. The danger that the anastomosis with the button will not be efficient when proper technique is used in connection with a good button is no greater than when anastomosis is made by means of sutures. The chief danger from the button lies in the arrest of the button by means of dried fecal matter or a foreign body, as a cherry or plum stone. In the after-treatment it should be seen that the bowels are emptied at proper intervals. At the first indication of obstruction of the bowels the anastomosis should be examined. The recommendation of the use of the Murphy button in the large intestines has the same basis as in other parts of the intestine—that is, the easy technique and the brevity of the operation.

Stroganov's Treatment of Eclampsia.

Some years ago Professor Stroganov, of St. Petersburg, advocated the treatment of puerperal eclampsia by means of morphine and choral instead of by the administration of chloroform, his chief object being to avoid the pulmonary complications and the aggravation of the toxemia by the action of the anesthetic on the lungs and liver. Hitherto the method has not received much favor outside Russia, and the few attemtps that have been made to follow his line of treatment have not been very successful. Comparisons, however, between mortality statistics afford overwhelming evidence of the efficacy of Stoganov's methods. According to his latest report, he has treated 360 cases of eclampsia with a mortality of 6 per cent. Against this the mortality of Berlin is 14 per cent; at Leipzig, 15 per cent; in Mecklenburg-Schwerin, 24.4 per cent.: in France, 20 to 25 per cent.; and in the City of New York Lying-in Hospital, 30.8 per cent.

On the other hand, E. Roth has recently given the method an extended trial at Dresden in a series of thirty-one cases, and is able to record only one death.

The treatment consists in the administration of morphine and choral in repeated doses so as to prevent the attacks of convulsions. Nothing further is done except that the patient is kept absolutely quiet in silence and darkness. Any attention to the patient—hypodermic injection, douching vaginal examination, or catheterism—is carrred out under light chloroform anesthesia. At the onset of labor a hypodermic injection of 15 milligrams of morphine hydrochloride is given, followed an hour later by a rectal injection containing 2 Gm. of chloral hyd-

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"I have had remarkable success in the treatment of tertiary syphilitic eruptions and ulcerations with Resinol Ointment," writes a prominent eastern physician. Continuing, he says, "With its aid I healed an extensive ulceration of the skin covering the whole right side of the nose. This case had resisted all of the usual remedies."

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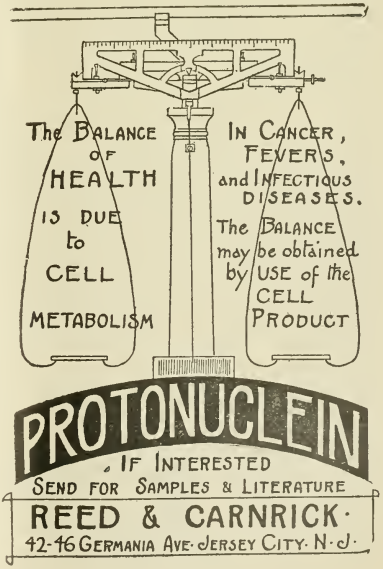
iate. At the third houra second morphine djrection is given, at the seventh a second nose of chloral hydrate, and at the thirteenth and twenty-first hours further doses of 1.5 Gm. chloral hydrate. On the second day, if the child is delivered and the patient is progressing, three more doses of 1.5 Gm. of chloral hydrate are administered. If, however' the convulsions persist, rapid delivery is effected or Cæsarean section is performed.—The London Hospital Journal.

Infantile Malaria.

Cardamatis says that during the nursing period infants are less liable to malarial infection than at any other age, and the months of least liability to infection are below three month. Morbidity is less under one year of age than later. As to the transmission of the hematozoa through the placenta, the author has made studies in connection with Pezopoulos and has concluded that the organisms do not pass through the placenta from the mother. The cases in which tests were made were twenty in number, and in all of them severe attacks of malarial fever were present, with many organisms in the blood on the maternal side of the placenta. The blood of the infants a few hours after labor showed no organisms. The blood in the liver and spleen of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two infants that died showed no organisms. In five cases in which the blood was examined on the fetal and maternal sides of the placenta no organisms were found on the fetal side. None were found in the blood of the cords of children. Paludism in infants may be acute and chronic; the chronic form is more frequent, on account of failure of diagnosis in the acute stage. The chill is less pronounced than in the adult, and is occompanied by vomiting and convulsions in many cases, while the stage of sweating is lacking. The spleen is much enlarged in the chronic form, and the cachexia is marked, the child having the appearance of a wax figure in color of skin. Anemia is severe.—Archives de Medecine des Enfants.

Those Conghs That Hang On.

Few conditions prove such a source of worry and annoyance to patient and physician during the cold months, as those obstinate coughs of bronchial origin. Not only is the cough a great bother, but if not checked it is not unusual for a graver state —such as a pulmonary tuberculosis to follow. For the relief of "those coughs that hang on," Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is a favorite remedy with thousands of practitioners. It takes the edge off the cough, soothes the irritated mucous membrane, and so builds up general health as to increase markedly the bodily resistance to other and more serious diseases. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is a potent yet palatable cod liver oil preparation.

"606" in the Treatment of Juvenile General Paralysis.

Abraham, in the London Lancet, reports a case of juvenile general paralysis, treated with an injection of 0.3 gramme of salvarsan, without improvement. At the outset Ehrlich cautioned against the use of "606" in degenerative changes. In syphilitic and parasyphilitic affections of the nervous system, hopes of success may be entertained in cerebral syphilis, and amelioration of symptoms in some tabetics and remission in general paralytics may follow the use of the drug. To anyone, however, acquainted with the frequent remission, and even sometimes complete cessation of ataxic and mental symptoms, for a time in tabetics and general paralytics without treatment, the evidence that such improvement is due to the use of "606" is not convincing, and the necessity of early and systematic treatment to prevent these late manifestations becomes increasingly urgent. In Wassermann's reaction we apparently have a means of discovering latent congenital syphilis in the children of known syphilitics, and these are the cases that seem particularly liable to develop juvenile general paralysis. Considering, then, the apparent hopelessness of checking the malady by even the latest form of treatment, and the known fact that mercury has been proved time and again to be equally useless, it is imperative that such children should be given the very best possible chance of the earliest possible opportunity; and the mere fact that treatment has a very dubious effect on the chsracter of the Wassermann reaction, instead of suggesting to us the impossibility of curing congenital syphilis, should stimulate us, on the contrary, to continue treatment, possibly for years, instead of, as is so frequently the case, stopping treatment as soon as the early manifestations during the first year of life subside.

Chrysarobin in Psoriasis.

Unna, of Hamburg, in a paper read before the British Medical Association, pointed out that it had long been known that in certain parts of the body the oxidation of chrysarobin took place strongly, in others the change was slow and weak, and he recounted experiments carried out by him which showed that the action of the remedy was not due, as had been widely held, to its oxidation to chrysophanic acid. Yet it was certain that some change in the substance chrysarobin must take place else we should fail to account for the remarkable variations in its efficacy as a treatment of psoriasis in different localities of the body. Nor would the process of oxidation of the substance alone account for the difference. There remained the third possibility that the final product of oxidation was the active substance. This active substance was not chrysophanic acid but a substance,oxychrysorobin, hitherto undescribed. The change was brought about by the presence in certain parts of the skin of oleic acid. A totally different substance was formed by the oxidation of chrysarobin in the presence of alkalies. The indication for treatment was to convert the chrysarobin into oxychrysarobin by the combination of chrysarobin and oleates of lead. After a After a year's experience of the treatment he was able to recommend it as an especially quick and through treatment of psoriasis.—The London Medical Lancet.

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ports commending on the merits of their excellent preparations are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme Court of Victoria at elbourne, and others reported before in the medical literature show that every physician should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Trephining for Glaucoma.

Ellitt (Indian Medical Gazette) says that in Bombay and Madras there is encountered an enormous amount of glaucoma, and that he is dissatisfied with the results of iridectomy. Lagrange's conception of a filtering cicatrix by means of a combined sclerectomy and iridectomy, the operation being performed close to the limbus with a keratome and scissors, has given excellent results. It is not easy, however, to graduate the amount of sclera to be removed, nor is the operation free from the danger of a serious vitreous accident.

The Dr. says that his object might be successfully and easily obtained by means of the trephine The operation proved to be an extremely easy one. The lowering of tension which immediately followed was marked, the iris was less apt to give trouble and the risk was greatly reduced.

The operation may bo performed under the local influence of cocaine and adeenalin, dropped into the sac. If there is much pain or congestion, or if the patient is unruly, a hypodermic of morphine may be given twenty minutes before the operation. In recent cases the Dr. has used subconjunctival injections of cocaine and adrenalin with excellent results. The patient looks down, and a large triangular flap of conjunctiva is dissected down from above the cornea, the attached base of the triangle lying at the sclerocorneal margin. Experience has shown the importance of dissecting this flap right up to the limbus attachment of the conjunctiva. The flap is turned down on the cornea. The spot selected for the trephining should be as close to the limbus as possible, and should be prepared by using the scissor points freely, either cutting or scraping or both, right down to the scleral coat. It is important that no conjunctival tissue be left, as otherwise it will catch in the trephine and tend to draw the flap into the latter as it is working.

The globe is steadied by pressing on the cornea through the down-turned flap.

The trephine is used with quick, light movements, and care is taken that its first application suffices to bite into the sclera before it is raised to see the progress made. Once a clean ring is thus started, it is very easy to replace the trephine in it. At first the operator feels the need of frequently removing the trephine to watch progress, but he soon learns to know by the feel when he is through. As soon as the anterior chamber is tapped, aqueous fluid wells up alongside the trephine; even apart from this, there is a curious sucking sensation which tells one the trephine is through. Moreover, the patient often helps by a slight movement due to the pain which attends the completion of the section. The conjunctival flap is replaced in situ to see whether the iris is in position or not. If it is, and if there is no bulging of its base into the wound, the eye is at once closed. It sometimes happens that the iris bulges into the section the moment the disk is cut through; if so, it is snipped with scissors to let the aqueous fluid escape, and it then often goes back of itself. If it does not, then an iridectomy is performed. As a rule, a very small and peripheral section of the membrane suffices; more rarely it is necessary to make the iridectomy complete.

It is possible by using the points of the scissors, and dissecting concentrically with the cornea, to get very close up to the limbus. In doing so, the points should be directed toward the plane of the posterior pole of the lens, thus undermining the limbus and making a deep groove overhung by the latter. It is the making of this overhung groove which determines with certainty that the trephine has entered the chamber.

If the trephine used is a sharp one, a clean disk is quickly, easily, and certainly cut out; in a large number of cases this disk remains attached at one small point, which when cut by scissors leaves a cleancut circular hole. It is well to press a little more on the corneal than on the scleral edge of the disk, so as to make sure of entering the chamber as far forward as possible.

Eserine is instilled into the eye after op-

"nothing is more estimable than a physician, who, having studied nature from his youth, knows the properties of the human body, the diseases which assail it, the remedies which will benefit it, exercises his art with caution and pays equal attention to the rich and poor."

Successful therapy is founded on these principles. The treatment of inflammatory conditions is only in so far successful as the proper remedy is chosen and applied.

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eration if for any reason there is fear of a prolapse. As a rule no drops whatever are used afterward.

One hundred and twenty-eight cases are reviewed, of which 122 were primary. There were six instances of loss of vitreous. In four of these it was very fluid in consistence, and the loss was free in all. In two others the escape was very small. In five cases there was failure to enter the anterior chamber with the trephine. In 65 cases a portion of the iris was removed. In only one cases did the operation fail to immediately lower tension, and in that case a subsequent operation was performed.

Use of Sodium Perborate in the Guaiacum Reaction for the Detection of Blood.

Bardach and Silberstein (Journal of the Royal Institute of Public Health) says that when sodium perborate is substituted for the oxidized turpentine usually employed in the guaiacum test, the reaction is rendered extremely sensitive. Five cubic centimetres of the fluid under examination (urine, stomach contents, etc.) are treated with from 1 to 5 drops of freshly prepared saturated alcoholic guaicuam resin solution; about 1 grm. of powdered sodium perborate and 10 cc. of 30 per cent acetic acid are then added, the mixture is shaken and a quantity of alcohol is slowly added, so as to form a layer on the surface of the mixture. A blue or bluish-green ring appears within five minutes at the junction of the two liquids, even if the liquids contain as little as 0.035 grm. of blood per litre. Chlorides do not affect the test.

Gastroduodenal Ulceration.

Monsarrat (Liverpool Medico-Chirurgical Journal), states that on the general question as to the necessity for surgical treatment to supplant the purely medical treatment of gastric and duodenal ulceration, statistics appear to speak quite definitely. Bulstrode's figures from the London Hospital records showed in the first place that this affection, treated and untreated, is attended by a general mortality of 18 per cent from peritonitis, hematemesis, and other causes; in other words, about one out of every five patients suffering from ulcer dies of the disease. These statistics take no account of the admitted fact that simple ulcer is not infrequently transformed into carcinoma. Patterson traced the after-history of 72 cases treated in hospital by medical measures and discharged cured; the result found was that out of the 72, ten only were free from symptoms of ulcer at the time of the investigation. No doubt statistics from private practice would show better results than these from medical treatment alone; the fact remains, however, that whereas gastric and duodenal ulceration is a disease attended by a high mortality, medical treatment can be relied upon for cure in a minority of cases only: The results claimed for surgical treatment are greatly in advance of this. Mayo Robson's results may be taken as an example—out of 110 cases submitted to gastroenterostomy 96 were free from all symptoms from all symptoms from a year to five years after the operation. It is indisputable, therefore, that gastroenterostomy is of great assistance in the treatment of these ulcers; it is necessary, however, to remember that the operation does not cure at once, and does not obviate the necessity for dieting and medicinal treatment for a period until healing is complete.

Treatment of Puerperal Mastitis.

Schwartz (Progres medicale) indicates the modern treatment, prophylactic and curative, for mammary abscess during lactation. If the patient be seen in the stage of simple distention and congestion, with a moderate degree of lymphangitis of the skin attempts should be made to prevent the glandular infection which is the next stage in the infective process. The first thing is to establish a routine procedure of scrupulous cleanliness, carefully washing out all the crevices in the nipple before and after each time of suckling. Should fissures be present, a nipple shield should be used to facilitate their healing, but the feeding of the child by the breast should not be discontinued. If, however, this should be found necessary, or if the breast should be distended and painful, the whole gland must be carefully supported and compress-

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ed by means of a firm bandage, applied over a thick layer of cotton-wool, and the infected milk pressed out by gentle, patient manipulation from the base toward the nipple twice a day. If pus forms it must be evacuated, but instead of the long incisions formerly employed, it is quite sufficient to make one or, preferably, two small openings, just large enough to admit of drainage, and all done under local anesthesia. Aspiration of the pus must then be practiced twice daily by means of a specially adapted bell glass, fitted with any suitable means of exhausting the air within it; and in a few days cure takes place without the risk of general anesthesia, and without mutilating the breast by the long incisions formerly required.—British Medical Journal.

The Miostagmin Reaction, Wassermann and Globulin Reactions in Internal Diseases of Syphilitic Origin.

Comessatti has examined nine cases of aortitis in persons of various ages, and obtained a positive Wassermann reaction in them all. In a case of aortic syphilis with insufficiency of the sigmoid and Argyll Robertson pupil, the reaction of Wassermann was positive with blood serum, and with the splenic transudate; negative with the cerebrospinal fluid, as was also the globulin reaction. In parasyphilitic affections of the nervous system the reactions should be made with the cerebrospinal fluid. In hemiplegia in young persons this reaction is of great assistance in determining whether the paralysis is of syphilitic origin. The same is true of early tabes. In luetic cases in which the Wassermann reaction was positive the globulin reaction was also present. In cases clinically negative the reaction of Wassermann was also negative.—La Riforma Medica.

Reflex Pain in Diseases of the Abdominal Viscera.

Maylard (British Med. Journal) calls attention to the fact that if some powerful and exaggerated stimulus arises from an organ, not only are the cells specifically connected with the sympathetic in the cord greatly excited, but also those neighboring

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one associated with the sensory nerves; hence it comes about that pain is often felt in the area of the abdominal parietes over the region of the affected organ. Not only may the cells in the immediate continuity be excited, but other cells more remote, and the distribution of the pain may become more diffuse and distant. The Dr's. main reason for thinking that in bowel disease we have to deal with really a splanchnic pain is that one usually fails to obtain any evidence of a cutaneous or muscle hyperalgesia. Nature seems to make an exception in her method of dealing with the bowel when implicated in obstructive conditions as compared with her protective measures in certain diseases of other parts. It matters not where the viscus is situated within the abdomen nor where the lesion is located in the viscus, the initial acute seizure is most frequently felt in the midline, although variations will exist regarding the particular spot in this line. The explanation of the fact that in nearly every instance the pain is referred to the middle line is explained on the basis that the cells in the cord which receive the afferent fibers of the sensory nerves contained in the lower six intercostals are abnormally irritated. Without attempting to differentiate clinically between lesions causing pain in the same spot he gives a sort of classified list of the diseases which may be expected to cause reflex pain in certain definite ereas. (1) Perforation of a gastric or duodenal ulcer, rupture of the gall-bladder, acute hemorrhagic pancreatitis, cause acute pain to be felt in the epigastrium. (2) Perforation of the appendix vermiformis or of the small intestine, ruptures, strangulations and obstructions from various causes, embolism or thrombosis of the mesenteric vessels, etc., cause acute pain to be felt in the regoin of the umbilicus. (3) Rupture in tubal affections, including extrauterine pregnancy, cause acute pain to be felt in the hypogastrium. While diseases of the abdominal viscera may give rise to reflex pain located in one or other of the anatomical regions into which the abdomen is artificially divided, all reflex pains experienced in these particular regions do not necessarily signify diseases of the abdominal viscera.

Sodium Cacodylate in Syphilis.

Few articles appearing in the medical press in recent months have attracted more attention and comment than that by Dr. John B. Murphy, of Chicago, published in the Journal of the American Medical Association of September 24, 1910, in which the writer detailed the striking results obtained by him through the hypodermic administration of sodium Cacodylate in the treatment of syphilis. Physicians who have not seen the article in question will be interested in the following abstract, as published in Therapeutic Notes.

"Administered in doses of ½ to 2 grains hypodermically, its action was prompt and end efficacious. Chancres became clean ulcers without induration in forty-eight hours; mucous patches cleared up in twenty-four to forty-eight hours; ulcers of the palate and pharynx healed in three to six days. In a child nine months old ¼ grain injected into the pectoral muscle caused a papillary syphilide to disappear in forty-eight hours. Two 2-grain doses, twenty-four hours apart completely relieved the pain of a patient who suffered from active gastric crises (luetic) which usually lasted three weeks. An advancing perforating ulcer of the palate, which had resisted injections of ¼ grain of mercuric bichloride daily, promptly yielded to Sodium Cacodylate, two injections of ¾ grain each. The ulcer was healed in six days.

"Dr. Murphy suggests that Sodium Cacodylate be employed in primary doses of 2 to 4 grains, depending on the size and strength of the patient, and not repeated within three or four days unless there are special indications for it."

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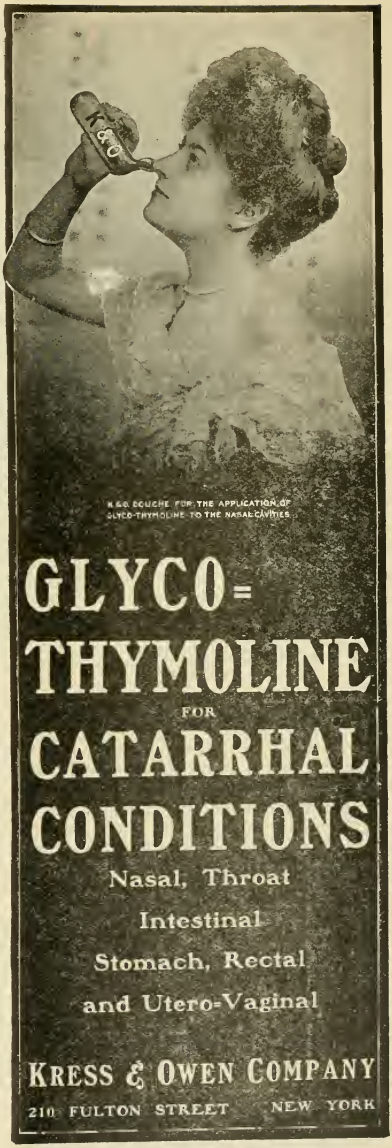

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Chrysarobin in Psoriasis.

Unna, of Hamburg, in a paper read before the British Medical Association, pointed out that it had long been known that in certain parts of the body the oxidation of chrysarobin took place strongly, in others the change was slow and weak, and he recounted experiments carried out by him which showed that the action of the remedy was not due, as had been widely held, to its oxidation to chrysophanic acid. Yet it was certain that some change in the substance chrysarobin must take place else we should fail to account for the remarkable variations in its efficacy as a treatment of psoriasis in different localities of the body. Nor would the process of oxidation of the substance alone account for the difference. There remained the third possibility that the final product of oxidation was the active substance. This active substance was not chrysophanic acid but a substance, oxychrysorobin, hitherto undescribed. The change was brought about by the presence in certain parts of the skin of oleic acid. A totally different substance was formed by the oxidation of chrysarobin in the presence of alkalies. The indication for treatment was to convert the chrysarobin into oxychrysarobin by the combination of chrysarobin and oleates of lead. After a After a year's experience of the treatment he was able to recommend it as an especially quick and through treatment of psoriasis.—The London Medical Lancet.

Irritation of Skin from Mercurial Lotion

An extraordinary case of susceptibility to poisoning by mercurial lotion is reported in "Le Progres Medicale" by Tissier and Corpechot. The patient, a healthy woman of thirty-two, was admitted to hospital for her sixth pregnancy. She gave a history of having suffered at her previous confinment from an eruption of the lower abdomen, inner surface of the thighs, and around the anus, which she attributed to the use of corrosive sublimate for cleansing the parts during the puerperium. With the exception of a rash which covered the whole of her body at a time when her first child died of meningitis at the age of nine months, no history of cutaneous eruptions other than those connected with her lying-in could be obtained. Inconsequence of her statement, care was taken to avoid using mercurial preparations for sterilization purposes during her lying-in. After the child was born, however, and before the placenta had been removed, the midwife sterilized her hands in a solution of 1 in 1000 mercury oxycyanide. She then expressed the placenta. The same evening the patient complained of a smarting in the region of the umbilicus, and a patch of erythema was noticed corresponding in position to the place where the midwife's hand had rested when applied to the fundus uteri. Next day this patch was even more defined, the affected skin being red and slightly raised above the surrounding level, minute vesicles containing fluid being scattered over it. This fluid was at first colorless, but gradually became turbid and yellow. A sensation of itching was present. The erythema faded gradually after the third day. At no time were there any general symptoms, nor were there any signs of an eruption elsewhere on the body.—The Hospital Journal London.

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These managers are expert in the use of massage, and employ it when indicated. When used in the proper cases, it adds very much to the rapid recovery of the person taking the bath.

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Phthisis Treated by Potassium Bichromate.

James B. Tombleson reports six cases of phthisis successfully treated by the internal administration of potassium bichromate. The author gives potassium bichromate in doses of ¼ grn. (2½ minims of a 10-percent. solution in water) either alone or in a tonic mixture (phosphate, hypophosphite or simple iron), the dose to be taken in a wineglass of water after food, at first twice later three times a day. The first dose and possibly the second may cause vomiting, but Tombleson does not think this of importance, as in his experience, tolerance is easily established without missing a dose. The color of some of the mixtures changes from yellow to green, but this seems in no way to impair the efficacy of the mixture. Improvement was noticed in the patients after the first fortnight of treatment, and while the author admits that the number of cases submitted is small, yet he hopes that the evidence will be sufficient to induce some to try it for themselves.—The London Lancet.

The Buccal Mucosa in Relation to Tuberculosis.

Giliberti (The British Med. Journal) mentions certain experiments made by him to determine how far tuberculosis infection came about via the normal mucous membrane of the mouth. For this purpose removed the cervical and inguinal glands of 30 children dead from various non-tuberculous causes, and, as far as was known, free from signs of tubercle during life. The Dr. made separate mixtures of the two sets of glands, and then injected portions of each of the mixtures into different sets of guinea pigs previously subjected to the tuberculin test. Of the animals injected with the mixture of cervical glands 11 died of tuberculosis, 17 died within a month of other diseases, and 2 (killed three months later) showed no sign of tubercle. Of the second series of animals (those injected with the mixture of inguinal glands) only two died of tubercle, five of other diseases, and 23 showed no lesion. From these experiments the Dr. concludes that the buccal mucous membrane may give passage to tubercle bacilli, and probably does so more frequently than is realized, and that consequently more attention should be paid to the mouth as a possible channel of tuberculous infection. Subsidiary questions arising out of his research are: (1) Is there an anatomical path from the mucosa of the mouth to the glands of the neck and thence to the peribronchial glands and right heart. (2) If every bacillus reaching the larger circulation from the mouth must first pass through the lungs, why is not pulmonary tuberculosis more common in infancy than it is as compared with other tuberculosis localiza-

tions. Perhaps the incomplete development of lymphatic nodular in the lungs of children and non-retention of bacilli in the comparatively large pulmonary capillaries may partly explain this immunity.

Congenital Dextrocardia. Cor Triloculare Biventriculare.

Foggie (Edinburgh Med. Journal) when adding an additional case of congenital dextrocardia and trilocular heart to the list of those already known the author takes the opportunity to discuss the anatomy and the etiology of the two disconditions. In the progress of his communication, he reviews the literature of the subject and arranges it in a manner which will greatly facilitate the work of subsequent inquirers. The Dr. says that true or pure dextrocardias are to be separated entirely from ordinary cases of inversion of viscera, and he notes that the true case may be due either to extrinsic or intrinsic causes. The causation of the former is of comparatively little interest and the causation of the latter still awaits satisfactory explanation. It is known that true dextrocardias are often associated with other defects and that they are not true inversions, for, as the author points out, even when the cavities are reversed the vessels are corrected, and Schrotter and Paltauf are justified in their view "as to the absence as yet of any true case of inversion of the heart and blood-vessels."

Tubercular Dactylitis Treated by Potassium Permanganate.

James Scobie, of Edinburgh, records the case of a seventeen-year-old girl successfully treated for tubercular dactylitis by the application of crystals of potassium permanganate. A poultice had been applied to the festering finger by the mother and this had drawn away a small fragment of bone. The wound refused to heal and when examined the finger was found to be much swollen and tender, the inflammation extending down well beyond the joint, evidently the result of a mixed infection. A week's daily dressing with mercuric chloride (1:1000) reduced the inflammation to a minimum, and allowed the getting away of much of the hard skin. The hole in the tip of the finger through which the fragment of the bone had escaped could now be seen, but the cavity soon filled up with a red, hyperemic granulation tissue, which extended below the softening hard skin over the pulp of the finger-tip in front, and posteriorly for a small distance beneath the nail. It appeared at first as though this tissue would heal, but upon pressure from below a sero-purulent material forced its way through.

The author then placed a few narrow and sharp crystals of potassium permanganate on the pulpy granulation tissue and stabbed them down with a fine probe, besides leaving one or two on the surface and between the tissue and the nail. These were held in place by a strip of gauze placed longitudinally over the finger-tip and another binding it circularly, the whole covered with wool and a bandage. The finger was then bound firmly to a posterior splint and further supported in a sling. The pain was acute and lasted six or seven hours. The treatment was repeated on the second day, and on the fourth day all the granulating tissue had disappeared, leaving a deep cup-shaped depression which, however, showed still some unhealthy grey tissue about the floor and sides. Two crystals were placed in this, and a week's respite given. There still being some oozing from the bottom at the end of the week, two more were placed in position, to remain for a week again. At the next examination the depression had filled up flush with the clipped nail in front. There was still some raw discharging tissue beneath the nail behind, and some ground fresh crystals were powdered on this area. This proved to be the last application necessary and the finger tip healed entirely over, looking perfectly healthy in every way. The girl was placed upon cod-liver oil, and arsenic, nux vomica and iron, and advised as to fresh air and abundant feeding. The author writes, "No doubt these added their influence to the healing, but the rapidity of the closure seems to point largely to the local treatment."—The London Prescriber.

Laryngeal or Winter Coughs.

The Journal of Nervous and Mental Diseases in an article by Dr. Walter M. Fleming says: In acute attacks of laryngeal or winter cough, tickling and irritability of larynx, Antikamnia and Codeine Tablets are exceedingly trustworthy. If the irritation or spasm prevails at night the patient should take one tablet an hour before retiring and repeat it hourly until the irritation is allayed. Allow the tablet to dissolve slowly in the mouth swallowing the saliva. After taking the second or third tablet the cough is usually under control, at least for that paroxysm and for the night. Should the irritation prevail in the morning or at midday, the same course of administration should be observed until subdued. In neuralgia, in short, for the multitude of nervous ailments, he doubts if there is another remedial agent so reliable, serviceable and satisfactory, and this, without establishing an exaction, requirement, or habit in the system, as morphine does.—The New York Medical Journal.

The Charlotte Medical Journal

VOL. LXII CHARLOTTE, N. C., APRIL, 1911. No.4

HARELIP.

By James M. Parrott, M. D., Chief Surgeon Memorial Hospital, Kinston, N. C.

Save for convenience of description, the division of this distressing deformity into three classes as laid down in text books on surgery is of no special value. The classical operations (such as De Sault, Nelaton, Malgaigne, Geraldes, et al) are of practical importance only when used to illustrate a teachnique or as a guide. Many harelips, especially when double and complicated by a projecting inter-maxillary bone, tax the surgeon's ingenuity to the limit. Nothing can be more "botchy" than merely freshening the edges of a first degree lip cleft, and simply suturing the edges together. The best which can be expected from such a procedure is lessening the notch in the lip just a little.

Netalton's classical procedure is the ideal for a simple first degree harelip, and is so easily done and so simple in conception as to require no discussion save when dealing with medical students.

Complete (third degree) or nearly com plete (second degree) harelips present complex problems. Especially difficult are those cases in which there is an accompanying cleft palate (and in this variety a cleft palate is practically always present) with or without entire absence of the floor of the nose. It is very important that the surfaces at the nostrils be neatly and properly coadpted. Unless care be exercised and more than ordinary skill exerted at this point, the best cosmetic effect will not be obtained—a more or less flattened or distorted nose may be the result. The inexperienced surgeon seldom gives enough attention to this point. A suture (a shotted silver wire probably the best) passing from sulcus to sulcus of the nasal alae will prove of special value here. Mumford, especially advocates this and experience will prove its wisdom. Of equal importance, cosmetically, is the formation o fthe natural "tit" on the lip line. If omitted, the operation is more or less a failure.

The sutures had best be very small and so placed as to not pass through the entire lip—up to but not including the papilary layer of the skin. The suture should be introduced from the mucus membrane surface whenever possible. I prefer the smallest size silk worm gut. To be a complete success, this operation must leave practically no scar, a well shaped nose, and a properly placed natural-shaped and sized lip "tit."

The separation of the cheek from the bone is unnecessary. How this idea ever possessed the thinking surgeon is hardly conceivable. Almost every text-book on surgery advises it, and nearly all surgeons actually do it. In my judgment it should be abandoned. I have not loosened the cheek for twelve or fourteen years, not even in extreme or very hideous complete doubled hare lips with projecting intermaxilary bone. I have not seen the necessity for it, never have regretted not doing it, and on the contrary have been highly pleased that I did not do it. Bl careful mortising, all a tiny bit of tissue be sacrificed at the most? By careful mortising the edges, all tissue of any service can be saved and utilized to great advantage. This is difficult and tedious in most cases, and especially so with double harelip. If any tension exists after the operation is complete, it can be relieved by the proper application of adhesive plaster. I emphasize the fact that loosening the cheek is not necessary to prevent or lessen tension—the only purpose of cheek-separation.

The preparation necessary for this operation is very simple. I prefer the administration of a mild cathartic 48 and 24 hours previous to the operation. The mouth, nose and cheeks should be cleansed the day before and the morning of the operation with a mild alkaline antiseptic, or a saturated solution of boric acid. The lips possess great resistance to infection and heal very promptly and satisfactorily, even under the most adverse conditions. The dressing should be very simple, a super-aboundance is not only needed but is really disadvantageous. A light, small, strip of sterilized gauze should be placed on the wound—just large enough to cover it—and a Z. O. adhesive strip applied.

The proper application of the adhesive is the most important single step in the entire after-dressing, and is of equal importance to the correct paring and mortising of the lip. Taylor's method is very good. Mumford's "butterfly" strip is commendable. Neither of these is best unless the cheek be loosened during the operation. In my procedure both are unnecessary. I prefer, and very decidedly, applying two narrow strips placed across the wound over the entire extent (of course in the same direction) of the zygomatic muscles, and reaching below the corner of the mouth on the opposite side, and rather tightly drawn. This contracts the zygomatic muscles to a great extent, and prevents undue tension on the suturs. This simple dressing should be changed, and the wound, nose and mouth lightly irrigated with boric solution every other day for about ten days. The face should be fixed with adhensive a few days longer. Taylor's method is very good at this point.

I have been asked at what age had the operation best be done. I prefer 18 to 24 months, though any time from six weeks to three years old is very satisfactory. I have operated on a goodly number of cases much older, some of them in adults, with splendid results. The lips aid very materially in shaping the face, and for this reason the operation should not be delayed too long. It is much more important that it be done rather early in complete or double harelip, than in the incomplete varieties. Most important of all, the infant should be in good health at the time of the operation. Practically all these cases suffer more or less at one time or another from gastro-intestinal disturbances, and an early operation will prevent this to an appreciable degree. The recollection of this fact will determine an early operation, all other things being equal. In consideration of the mother's feelings, we should operate at as early an age as we can. The tender heart of the parent is almost broken at the sight of this deformity. It is the duty of the surgeon to keep this in mind in determining the age for operation.

The following cases selected at random tipify the work and the results. Mr. A, age 21, referred to me for operation for simple incomplete harelip. An inverted incision was made over the lip cleft. The wound was closed vertically, thus completing an ordinary Nelaton operation. The only problem to solve in a case like this is just how long the incision should be. Experience is the best teacher. To form a well shaped "tit" and a well curved lip, a fairly safe rule to follow is to make one arm of the incision the length of one side of the harelip, letting its lower one-fourth parallel the upper fourth of the corresponding side of the cleft. This case is mentioned only to illustrate the simple procedure for the simplest variety and to emphasize the fact that even with the most insignificant harelip, the utmost care must be exercised to form a well shaped lip and to prevent a scar.

Case2. Miss Y., age 15. This is not a harelip proper, but is mentioned here because of its co-relation and its extreme interest. When a child this patient had cancrum oris, and as a result, the upper lip adhered to the superior maxilary in addition to forming an artificial cleft in the lip near the corner of the mouth by slaughing. Fortunately the corner of the mouth itself was preserved. After cutting the adhesions between the lip and the bone, I did a mortise operation with splendid cosmetic result. Two teeth were absent. A dentist was called in to assist, and he made a well fitting and very neat bridge, which was really a thing of beauty. I am indebted to my distinguished relative, Dr. D. W. Parrott, D. D. S., for so brilliantly completing a most satisfactory operation.

Case 3. Little S., age 18 months. This case presented the most horrible looking deformity, I have ever seen. A very large and long inter-maxillary bone presented itself between two lip clefts, making a typical but exagerated complete double harelip. In this case the inter-maxilary projection was removed. After an interval, I operated for the harelip. I did not separate the cheek from the bone, and hence was put to my metal in obtaining enough tissue to get a satisfactory result. I did a double mortise operation adapted to the case, and applied the adhesive as is my usual custom, and as before mentioned. The sutures were introduced as stated before, as far as possible, and the after treatment usual to all harelips was applied. I am happy to say that a better result could not have been obtained, all concerned being delighted, and enthusiastic over the result. As soon as the child reaches the proper age, it is my purpose to have a dentist bridge for the front teeth where the inter-maxillary bone was removed. This will give the proper shape as well as teeth, and by attaching a permanent plate to the bridge, it is my hope that the child will have a very satisfactory plate. I did not do a cleft-palate operation in this instance because of the extreme deformity and condition of the child. In addition, I did not see any reason why the cleft should be done at that time. It can be done later, if desired. I do not usually remove a part of the inter-maxillary bone. I thought it best, however, in this instance. I prefer reducing it, and utilizing it to fill in the cleft in the palate.

"Commercialism Pervading the Medical Profession—A Study of the Man and a Remedy For the Evil."

By A. Bascomp Croom, M. D., Maxton, N. C.

By way of introduction, that I may be clearly understood, I wish to say first that no member of the profession has a deeper feeling of respect for the principles for which we stand and for the real gentlemen of the "old school," who lived strictly up to the code of ethics, than has the writer. Nor do I believe there is one among us who loves the profession more and is more optomistic as to the ultimate adjustment of things than I. In the outset I will presume that no one needs convincing of the fact that commercialism not only does prevail in the medical profession, but that it is daily on the increase.

Few localities, I dare say, are entirely free from members whose foremost thought is commercial and whose sole plans are to say the least, a deeply laid business scheme to get into the other fellow's work. So often is this the adoption of unprofessional, unethical and dirty methods to injure the man, who is his brother, his co-worker, his best friend. This man will, I concede, in the majority of cases have ready to present

(Read before the Tri-State Medical Association of the Carolinas and Virginia, Raleigh, N. C., Feb. 22-23, 1911.)

some form of argument for the position which he has taken. He says, "I am a new man and must have a livlihood," "Business is business," why not drop this little remark here or there where it will be construed to mean that Dr. Blank is not well up, that he is not attentive to his patients, that he is getting old and doesn't care for the work, that a certain case should not have died had he adopted certain treatment, etc.

Again he will argue I am throughly justified to say and do these things because he does thus and so toward me. Oh, yes, excuses are easy to find and business is business. But does this unworthy member of the great and noble profession stop to think that he is or should first of all be a gentleman? Has he forgotten the golden rule, and the fact that he himself will some day be one of the members who is "getting old and doesn't car for the work?" Does he stop to think that in walking or pushing himself into the practice of a certain family by those methods that he is without provocation stealing from the older man a friendship of many years? Why whould he not rather be nice, fair, and honorable to the family and to the family physician alike, leaving for the future the proper adjustment when the older man is really getting old and no longer caring for the work and voluntarily says to the family, "Call the young doctor who is active, capable and in every way worthy of the same love, respect, and confidence you have through these years accorded me?"

But this type is the man who to all appearances is an "alright fellow." We have another who, after all, may not be quite so bad. This man is broad in his assertion that he is in it for the money, that they have to pay for my services, it matters not what the conditions—whether that of wealth or poverty. He says to the man of means, "I only charge you this minimum fee," hoping thereby to get his future patronage and influence, while to some poor devil who must perhaps deprive his wife and children the absolute necessities of life in order to meet the bill, he requires for the same service an exorbitant and unreasonable fee. His one thought is the money and the way to get in and hold the practice. He has long since forgotten that his first duty is to bring relief and restore happiness to his fellowman. He has probably never known the high ideal and what is more, he never cares to know. He approaches the druggist on the subject of commission on his prescriptions, and tells how he always gives them whether they need them or not, and how many prescriptions he writes, that they are always for large quantities of the kinds of drugs on which he gets largest profits, that he will work off his old stock and a thousand unprincipled and scandelous tricks and methods he knows and will practice just for the sake of the commission and the nice office for which the druggist must pay the rents.

Gentlemen, should we of this great medical profession, tolerate such practices and still say he is a brother practitioner? Surely we al agree that such ideas are by no means in keeping with our code of ethics! Is there nothing to do in this matter? Who is the man among us practising such methods? Study the man and determine first his birth. Whence cometh he? If he is ignorant, let us find a way to enlighten him, now that he is in the profession and try in the future to see that such men go to other avocations. Let us debar such men from our profession. He is undoubtedly a man who is not by nature a gentleman, and let us work to the end that a man's personal character will be more scrutinized. Impress upon the young men that the first principle and the first requisites are that he shall be a gentleman and a man of honor and integrity. A high standard of medical education which will start with the candidate for matriculation in the medical schools. A more rigid searche in o the type of man who is applying for license before our State Examining Board and then a frequent reminder in the medical organizations. Stop retaliation and go to such a fellow with a candid and frank expression of the facts. If he cannot be persuaded that his methods are not in keeping with our high ideals bring him into the local organization of which he is a member tha. he may have a clear understanding as to what our code of ethics really means.

One thing leads to another and two wrongs will never make a right; therefore, avoid any suspicion of retaliation. Stand up for your rights as an honorable man in an honorable profession and stamp out this disgracefuul conduct which causes the laity to ask, why are doctors so jealous and antagonistic one of the other. Study a method to help the other fellow hold his practice rather than lose it. Be careful of your remarks which might in any way reflect upon the other brother and above all do not keep silent when you know your duty calls for a word of defence for the other man. As some patient is dissatified.

Surely there must be some among us who have entirely lost sight of the fraternal spirit of the medical profession—at least so it would appear at times. Fear not, however, the profession is held by bands which are more powerful than personal interest. Although one unworthy member can be found here or there let it not be said the profession is divided or its members are jealous one of the other. Let us put an end to the opinion that physicians are antagonistic and will always disagree for commercial reasons. Let us try to know the other fellow better and be charitable toward him in forming opinions. Go to him, giving him the benefit of the doubt, and clear up these little differences or musunderstandings and even though his offence should have been intentional if it not so likely to occur again.

I venture the assertion that 95 per cent of disagreements between physicians come from misunderstandings and in a large propotrion of these some member of the laity is responsible for such misunderstandings in that he has made some statement intended to impress upon the doctor his friendship and personal interest in his career, not stopping to think that his remark will bring about trouble in the future. Why then should we allow a freindship with our brother physicians broken when a short talk with him would prevent such a breach? Let us then take a broader view of these matters and not jump at conclusions which interfere with our fraternal relationships. Get rid of the men who are unworthy of the high standard which our profession deserves and shall always have. Raise the standard of medical education and keep out in the future men who are purely and simply "money doctors" and care not for the kind of work turned out. Avoid retaliation in any way whatever in order that your own conscience may always be clear and above all else in adjustment of personal differences let us not forget the one word which holds us close to each other—fraternity.

A CASE OF PAROXYSMAL PULMONARY EDEMA.

By William Allan, M. D., Charlotte, N. C.

The case of W. M., white, male, age 65, native of North Carolina, veteran of the Civil war, now a merchant. Family history as to antecedents negative; has lost one child from epilepsy, has one with migraine, and one who is insane. No history of syphilis and wife has had no miscarriages. Habits—has been a notable trencherman and for years used alcohol to excess; at present time uses no alcohol and eats moderately. Past history—typhoid as a boy; pneumonia 20 years ago; operated on for strangulated hernia 7 years ago.

Present complaint—I first say the case about 10 P. M., October 27, 1910, during an attack of acute pulmonary edema. He was sitting upright in a chair with elbows on its arms, the better to bring into play the auxiliary muscles of respiration. Dyspnoea, both inspiratory and expiratory, was marked—the noisy rattling breatching being audible in the next room. The patient was constantly spitting up quantities of foamy blood-tinged serum (from 8 to 10 ounces during an attack). The expression was one of anxiety and apprehension. The entire surface of the body was pale and dripping with cold sweat. The lips and fifiger tips were cyanotic. The chest showed senile emphasema and was fairly resonant even throughout the lower back. Auscultation elcicited only a roar of moist rales.

The pulse wsa quick, full, and hard to compress; diffuse arterio-sclerosis was marked in all the peripheral arteries. Morphia, grs. 1-4 by hypo., relieved the condition in a short time.

On October 30th, this patent came to my office in his usual state of health. The ascent of one flight of stairs had caused considerable dyspnoea. After an hour's rest his systolic pressure was 230mm. Hg; haemoglobin 85 per cent; eosinophiles 1 2-3 per cent. Heart dulness from center of sternum to half inch beyond the nipple line, or 12 cm. in breadth. Apex impulse visable in 4th, 5th and 6th interspaces. Sounds at apex very soft with no point of maximum intensity; no murmurs; aortic second sound markedly accentuated. Both rate and force of heart beat irregular.

Has had to rise 4 to 5 times at night for years to urinate. Occasionally puffy under the eyes in the early morning. In June, 1910, was in bed several weeks with general weakness and in July had edema of the right leg from the knee down for a month. Urine clear, acid, 1016, showing serum albumen and granular casts. These attacks started in February, 1910, and always come on either just before or soon after going to bed at night. Neither the mental nor the physical occupations of the day seem to predispose to them in any way. However, the patient has noticed that he is much more liable to have an attack when his stomach is full or distended from fermentation. I saw this case in a similar attack November 27, and he had another January 16, 1911.

For a careful and clear-cut discussion of the various forms of acute pulmonary edema, the reader is referred to a recent article by Stengel (1). Basing his opinion on Welch's work, Stengel explains paroxysmal edema after this fashion:

Given a case of myocardial disease, accompanied by nephitis, and arterio-aclerosis with high blood pressure, the left ventricle is working to its full capacity and has practically no reserve force for any extra call made upon it. When the demand is made, the left ventricle becomes embarrassed, failing to send on the blood delivered to it by the right heart, which continues to work normally (the right side not having been worn out by working against a constant high peripheral resistance). The sudden oncoming of this disproportionate work of the right and left ventricles leads mechanically to engorgement of the venous system with sudden congestion of the lungs, denominated by Stengel in this class of cases, paroxysmal pulmonary edema.

(1) Paroxysmal Pulmonary Oedema and its Treatment. By Alfred Stengel, M. D., American Journal of the Medical Sciences, January, 1911.

THE DOCTOR'S BURDEN.

By J. C. Walton, M. D., Richmond, Va.

A plea for the old medical chronics who wander from physician to physician vainly seeking relief from their manifold ills until finally losing all hope they become the legit-

(Read before the recent meeting of the Tri-State Med. Asso., of the Carolinas and Virginia.)

imate prey of the charlatan and the quack, to be exploited by them for the remainder of their lives.

Gentlemen, are we wholly blameless for this deplorable state of affairs?

An active medical career extending over thirty years, the last ten of which have been devoted exclusively to the study and treatment of chronic diseases with laboratory and scientific methods of diagnosis, including also an abundance of clinical material have afforded excellent pportunities for demonstrating the truth or falsity of the vary many and diverse therapeutic innovations that are always confronting us.

Although, the scope of this paper is entirely medical still as a patriotic American I cannot but allude in passing to the wonderful progress and the brilliant achievements in surgery during the last twenty years and the very great pleasure it gives me to record the conceded fact that in surgery America is in the van and leads the world.

Has medicine kept pace with surgery in this rapid advance along all scientific lines? Sadly but frankly, as a medical man I must answer in the negative.

It is very interesting to review the many changes that have occurred marking the progress of medicine during the last thirty years. Up to that period the practice of medicine was largely empirical and you were taught that a certain treatment was indicated in a given condition or disease solely because the leading authorities and the authors of the standard text books of that period advocated such a plan of procedure.

Much honor is due Prof. H. C. Wood, of the University of Pennsylvania, for calling our attention to the study of the physiological action of remedies and to base our therapy solely on the effects thus obtained, a great advance was thus made not only in more scientific and accurate prescribing but in helping the profession to emancipate itself from the thralldom of empirmcism.

Regarding present day therapy Prof. Pratt, of Harvard University says, "Many of our leaders have apparently believed with Dietl, the high priest of Nihilism, that there are no true therapists, that they are only optimistic physicians. The result has been that most of the physicians of this country can be divided into two classes: those whose therapeutic unbelief or skepticism has led them to pay little or no attention to treatment and secondly, those whose reasonless faith accepts without question the claims of the exploiters of proprietary medicines."

Doubtless why physiologic therapeutics is still looked upon with suspicion by our best physicians is because they have received such scant recognition from medical teachers, and have been accorded such extravagant praise from irregular physicians.

For more than a decade physiologic therapeutics, viz.: Hydrotherapy, Electricity, X-Ray, Radium, Photo-therapy, Thermotherapy, Mechano-therapy, Massage, etc., (nature's own remedies and the nearer we live to nature the better off we are) have been rapidly forging to the forefront, especially in Germany, Austria, France, Italy, and even slow and conservative old England is falling into line and it is very significant as showing the trend of the times that The British Medical Asso., sent one of its most distinguished members, Dr. Howard Humphries, as a fraternal delegate to the last meeting of The American Electro-Theaupetic Association, at Saratoga, N. Y.

Thirteen out of the 19 German Universities give special courses in physical therapeutics, many of which are devoted to hydro-therapy.

In America, Tufts Medical College, of Boston; Temple Medical College, of Philadelphia; Kansas City Medical College, The University of Louisville, N. Y. Homeopathic Medical College Denver Medical College, Columbia University, Cornell, Fordham, Bellevue, Harvard, The N. Y. Polyclinic, and The Post Graduate Medical School & Hospital, The Illinois School of Electro-ther, Vanderbilt University, give partical courses in physical ther., and The South Carolina Medical College has adopted it as a part of its curriculum. This is a good beginning and it is most encouraging for scientific physical ther., will not be widely used in general practice until it is accurately taught in the medical schools.

Dr. Pratt well says that in America, the influence of this new movement in therapeutics is yet scarcely apparent. Here diagnosis is still supreme as in the days of Frerich and Traube in Berlin, that physician is most famous who can say to his students after an autopsy, we have found everything exactly as we expected.

Prof. Von Leyden, in describing the German clinics as it exists in the 20th century, devotes over half of his treatise to therapeutics and our attention is chiefly directed to physicial therapeutics.

Modern therapy in Germany is becoming more and more to mean physical therapy and Von Leyden said that physical therapy should be utilized not in the clinic alone, but it must become the property of the general practioner.

This is a confirmation devotely to be hoped for and much has been accomplished in this line abroad by the earnest labors of Profs. Von Leyden, Winternitz, Von Zeimsen, Semmnola, Erb, Krafft and others, and in our own country by such able and representative leaders as Profs. Baruch, Peterson, and Draper of Columbia University, Putnam and Pratt of Harvard, Morton, Snow, deKraft, Titus, Pope, Kellogg, Rogers, Page, Foster, Collins, Diffenbach, Hinsdale and many others whom we have not space to mention.

These pioneers are deserving of the gratitude of all humanitarians for their noble and self sacrificing efforts in elevating the science of therupeutics from a condition of anarchy, chaos and dissolution, to a progres-

sive scientific and rational system.

For more than a decade my work has been limited exclusively to the study and treatment of chronic diseases and mainly through the modern physicial methods the results have been so much more satisfactory than they were from the measures formerly in vogue that no considerations whatever could induce me to abandon them and to return to the crude and uncertain methods of our forefathers.

It might be interesting and profitable if time permitted to present a summary of the results now being obtained from the use of physicial ther, in all diseases. Of the results of static electricity and of the high frequency obtained therefrom in circulatory diseases, the vessels, and the heart and kidneys, in disturbances of metabolism and in glandular diseases. In diseases of the nervous and digestive system, of the treatment by fulguration of epitheliomas, pigments, neavil facial blemishes, etc. Of Thermo Penetration the new method of applying an intense degree of heat to the interior of joints. Of Galvanism in minor Gynecology, etc., but a long program and in consideration of the very many good papers yet to be read at this meeting I shall briefly consider the treatment of only two diseases, one the opprobium of medicine, the other of surgery.

Arterio-sclerosis or hardening of the arteries means certain death. Statistics show that the majority of all deaths after we pass he fiftieth milestone are caused by this dreadful disease, it matters no whether we call it apoplexy, paralysis, chronic nephritis or diseases of the heart and blood vessels, the disease is in any case the same. These results are not surprising when we reflect that the majority of physicians treat arterio-sclerosis just as they did 20 years ago. In preparing a recent paper on the treatment of arterio sclerosis by autocondensation, I wrote a personal letter to a number of prominent teachers and authors of the standard text books on the practice of medicine and I was indeed surprised and pained to know that these men of international reputation were sadly and densely ignorant of the modern methods of treating this disease, some of them never having heard of the treatment, this too, notwithstanding the fact that Arsonval published his epochal paper on the treatment of arterio-sclerosis by high frequency currents more than five years ago.

Since then d,Arsonval's conclusions have been verified by many independent operators in this country and abroad.

It has been demonstrated beyond all cavil by many capable and experienced clinicians that a judicious blending of hydrotherapy (the light bath) and artocondensation is at present the most reliable, rational and satisfactory method of treating arterio-sclerosis, this treatment is indicated in all cases, there are practically no contraindications to the intelligent use of these agents and they can always be relied upon to uniformly reduce tension, increase elimination, and to correct faulty metabolism.

The d,Arsonval current profoundly affects the chemical processes of the body, increases tissue combustion and oxidation, facilitates the elimination of waste products, nitrogenous debris which would otherwise form uric-acid, is converted into urea and the peripheral circulation in increased through vaso motor stimulation and regulation.

The treatment should be supplimented in all cases by the removal of all ascertainable causes as well as the careful personal supervision of the daily life with regulation of the diet and habits.

Specific cases should receive appropriate treatment and as that remarkable diagnostician and great therapeutic Nihilist Osler says that the man who understands syhilis knows all medicine this disease should nôt be overlooked, especially so as it is about the only type of arterio-sclerosis that is favorably or permanently influenced by drug medication, the use of the new remedy "Salvarsan," is promising. In the few cases that I have seen it used the results were very striking and in some of them bordering on the marvelous.

There can be no question to the unbiased progressive physician who is willing to take the trouble to investigate, that with further study along these lines by the great army of intelligent co-workers in this new field of therapeutics with the inevitable improvement in techinque and apparatus that physio therapy opens the door of hope to this large and increasing class of invalids and that with early recognition and prompt treatment arterio-sclerosis will eventually be classed among the preventable diseases.

Enlarged Prostate, Senile and Specific.

Statistics show that 80 per cent. of the cases of senile enlargement of the prostate are of the adenomatous or soft type, all of these are curable by the Morton wave current applied through the Rectum with a metallic prostatic electrode.

The remaining 20 per cent., or the bard and indurated prostates are best treated with the X-Ray and Galvanism to soften the tissues and to remove the hardness and induration to be followed later by the wave current to induce contraction, relieve inflammation, and to innervate the parts.

By the above means of treatment more than half of these indurated prostates will be relieved and all of them will be benefitted.

The only contra-indications to the use of the wave current is in the cases due to cancer and tuberculosis, the X-Ray can be tried in these carses without harm and sometimes with benefit.

Specific or Gonorrheal prostatitis is curable by the high vacum glass prostatic electrode applied through the Rectum.

The high frequency effule not only relieves the congestion and inflammation and

thereby reduces the gland to nromal, but through its well known bactericidal and deep penetration properties it destroys latent and deep seated gonocci as well as other pathogenic germs.

I have had old cases of gonorrhea, some of twelve years standing, who had gone the rounds of the famous specialists vainly seeking relief, to be cured by the above methods in conjunction with the radical cure of the accompanying urethral stricture by Galvanism, (Newman's method). I claim for the above methods of treating prostatitis, that it is safe, easy of application, is pleasant to take, the patient not infrequently going to sleep while taking the treatment and most important of all not only relieves the local condition, viz.: the inflammatory engorgment, enlarged prostate, the cystitis, and the atonic condition of the bladder and associated parts, but it relieves nervousness and insomnia, and by the correction of faulty metabolism has a most remarkable tonic effect on the entire organism.

My most grateful patients have been cured, doctors, and I found they all had a horror of the knife and while our good friend the surgeon is generally willing and anxious to remove his neighbor's prostate, yet from a large acquaintance among the medical fraternity I have not been able to meet a physician who would submit to having his own prostate removed.

Most chronics will give a history of vainly seeking relief first from their doctors and finally they fall into the hands of the ubiquitous Osteopath who promises a cure if they will pay in advance for the several week's treatment that will be necessary to straighten out the kinks in their back bone; from the Osteopath they continue their downward route to Christian Science and other Charlatans, and their last state is infinitely worse than their first.

In conclusion, fellowss, medicine is undergoing a crisis, we cannot afford to be idle, rather let us be alert, broad, enterprising and progressive. May we all get together with an open mind honestly attempt the solution of the great problems ever confronting us, striving to separate truth from error and with the utmost endeavor of mind and heart to live up to the obligations of our high calling.

Laryngo-Fissure For Non-Malignant Intra-Lararyngeal Growth.

By Clifton M. Miller, M. D., Professor of Diseases of the Nose and Throat, Medical College of Virginia; Laryngologist and Rhinologist to Memorial Hospital, Richmond, Va.

The larynx, a fibro-cartilaginous box lying at the upper extremity of the trachea and below the pharynx, is for the purpose of containing the vocal cards and preserving them as far as possible from injury. The vocal cords, two in number, are attached behind to the arytenoid cartilages and front to the posterior aspect of the thyroid cartilage. The function of these cords is to throw into vibration the column of air as it is forced from the lungs which vibrations are later shaped into words and definite sounds by the pharynx, mouth, etc. The interior of the larynx, including the vocal cords, is covered with mucous membrane and subject to all the diseases to which such membranes are liable. An intra-laryngeal new growth may be either malignant or non-malignant and the differentiation of a malignant from a benign growth is very necessary in dealing with tumors in this region; this diagnosis should be made before any operative procedure is attempted. If it becomes necessary to excise a portion for the purpose of diagnosis the microscopical work should be done with a freezing microtome with preparation for immediate operation if it prove malignant, for removing a part or cutting into a malignant growth in this region stimulates it to much more rapid development. Sir Felix Semon has emphasized this point in some of his voluminous writings upon the subject and his experience in operative work upon malignant tumors of the larynx has been probably as great as that of any other living man. Glandular involvement following malignant growth is late but when it does occur operation is probably useless. The case that I wish to report is one of non-malignant growth of the larynx, papilloma, located at the anterior extremity of the cords.

M. A. H., colored, age 50, first consulted me October 17, 1910, on account of hoarseness and increased difficulty of breathing. General health good and except for the condition of which she consulted me she has had no sickness since the diseaes of childhood. Her present trouble began about two years ago with hoarseness which gradually increased until at this date she is almost aphonic. In addition to this she suffers thoracic pains and can make no effort, having had to abondan her occupation as washer-woman on account of the increasing difficulty of breathing. Physical examination revealed the nose, pharynx and lungs free from any organic lesion. Examination of the larynx showed two tumors located at the interior part of the glottis, one attached to the right vocal cord an dthe other apparently having its origin in the larynx below the cord. On account of her color I advised against immediate operation and that for a time at least she should be treated medically; this in spite of the fact that she had been through the hands of various other physicians since the beginning of her trouble. Iodide potassium in increasing doses was prescribed for her and a spray of absolute alcohol for intra-laranygeal use. At the end of a month she had shown abso-

(Read before the Tri-State Medical Association of the Carolinas and Virginia, Feb-22-23, 1911.)

lutely no benefit from this form of treatment and she was advised to enter the hospital and have the growth removed surgically. To this she at once consented The 17th day of November a preliminary low tracheotomy having been done, the thyroid cartilage was split in the exact median line and two papillomata were removed situated exactly as had been already diagnosed by laryngeal examination. The thyroid cartilage was sutured, its lateral halves being very carefully approximated and the skin over it closed with several cutaneous sutures. The tracheal tube was allowed to remain for three days, after which is was removed and the wound from which it had been taken allowed to close by granulation. Her recovery was uneventful and her voice gradually restored. She says her voice is deeper than during the time previous to the onset of her trouble, but it is strong and of good quality and she no longer suffers with thoracic pains and dyspnea as she formerly did.

In doing an operation of this character, and for a non-malignant growth, several reasons induced me to select the external rather than the internal route. The location of one of the tumors was sub-glottic, the patient was short and fat and the distance between the hyoid bone and the suprasternal notch was very short and besides these facts her larynx was not very tolerant of examination and treatmnet. These things in my opinion, justified the selection of the operation done and made it the best one possible for the case. The external route having been selected it became necessary to do a low rather than a high tracheotomy on account of the shortness of the patient's neck, though in most cases the high tracheotomy would be preferable. During operation the patient was kept in the dorsal position with the head of the table lower than the foot and after opening the larynx the two portions were widely retracted to prevent aspiration of any blood into the luugs. No packing was necessary above the tracheal tube. There are no signs of return of the growth and on account of the small number of tumors and limited extent of earea involved I do not consider them to belong to the class of recurrent papillomara, which would have been cured by prolonged wearing of a tracheal tube. Chloroform was the anesthetic used as it gives the best results in laryngeal operation. Anesthesia was easily maintained by continuing the administration through the tracheal tube.

217 E. Grace St.

Insults to Digestion.

By Matt Otey Burke, M. D., Richmond, Va.

America is rearing a race of dispeptics in perverting nature's laws.

Read before the Tri-State Medical Association of the Carolinas and Virginia, Raleigh, N. C., February 22-23, 1911.

The United States Government is annually expending millions of dollars trying to ascertain the most suitable soils and proper fertilizers for plants.

The Pure Food laws are doing a great good in preventing the adulteration of foods in prohibiting the sale of stale vegetables and fruits and partially decayed meats.

The scientific farmer has learned what food is best for his various animals according to their uses, while he thinks very little of his own digestion and that of his family. Civilized man is usually governed in the selection of his food, not by the demands of his system, but by his appetite, real or imaginary, until his digestion resents the insults and demands an apology.

Children eat all kinds of trash sometimes because they are hungry, frequently becauuse they think everything was made to eat. They usually digest their food much better than adults because they are not subjected to the same mental worries, hurries and strains, principally because they are constantly in motion and in the open air. God pity the child that has to spend its days in the house deprived of the sunshine and pure exygen of nature. They eat many things that are injurious to the digestive tract, and often even wholesome food in such quantities that the system rebels.

Far too often do we find that the foundation of disease in adult life was laid in insults to digestion during the tender years Nature is slow to rebel, but sometime in life she will resent every insult offered her.

We have two classes of dispeptics: The class that is striving to reach that point in life when it can retire, and the class that has unfortunately been retired.

We live in an age when men and women must be constantly amused, some are wholly absorbed in business affairs, political ambitions, professional fame or social glories.

We suffer many ills at the hands of our cooks—both the good and the bad; the one spoils the broth i nthe mixing—the other in the cooking. Cooking should render food not only more palatable but more digestable. Food fried by the usual method hardens the cell membrane, causes the cells to shrink and surrounds them with a form of grease that is difficult to penerate.

Breads that are not properly risen and quickly baked, after the rising process is completed, contain soggy masses and a great many cells whose membranes are broken, and the starches coming in direct contact with the moisture at a low temperature with the moisture at a low temperature are fermented before actual cooking begins, and we have porous sour bread.

Meats that are placed in an oven or in water at a low temperature soon give up their natural juices, the fibrous tissue shrinks and the meat becomes tough.

Bacteria of various kinds find a habitat in the human mouth, and some bacteria interferes with digestion in the various parts of the tract, hence the importance of keep-

ing the mouth clean.

No one would attempt to make unground grain into bread. It could not be made into dough because the ingredients could not penetrate the outer membrane and form an adhesive mass. The grinding of grain is no more essential to the making of bread than is the mastication of food to digestion.

An illustration:—I once found a man lying in the broiling sun on a summer day in a semi-conscious condition. He was in a profuse cold perspiration, blanched face, cold extremities, with a weak pulse, distended stomach and in violent agony. On arousing him he told me he had eaten his dinner hurried and immediately returned to work, was soon taken with cramps in his stomach. The stomach tube was at once used; nothing passed through the tube, but the desired result was produced. He vomited more than a quart of meat, meat skins, onions and bread; nothing had been masticated and the digestive juices were unable to penetrate the massees, through most of the blood in his body had gone to the abdominal cavity and was whipping the cells into activity and the acid secreted was producing violent contractions.

The man who has only a few minutes for meals usually chews his food just enough to swallow it—forgetting the fact that his stomach has no teeth, and that the digestive juices must permeate every cell in order to digest that cell.

All food, vegetable and animal, is made up of minute cells surrounded by a cell membrance. The membrance must be dissolved or broken before the digestants can act upon them.

Proteids stimulate the secretion of acid and pepsin, if more acid is secreted than can be utilized by the food, it irritates the nerves in the walls of the stomach and duodenum, causing heart burn, acid eructations and pylorospasm. Undigested proteids often undergo decomposition and poison the system. Starches and sugars that have been delayed too long in the stomach or passed undigested beyond the ilium, are apt to undergo fermentation, forming alcohol and acids, which produce stupor, headache, lassitude and various other discomforts—other ills of improper mastication, over eating, or eating at a time when all of the energies are busy with mental strains or worries.

Mental anxiety, such a ssorrow, business perplexities and excitement interfere with the secretion from the various glands and the muscular movements of the digestive tract. Condiments, sauces, and various kinds of desserts, interfere with digestion by over stimulating, retarding or neutralizing the secretions, by forming chemical compounds that are totally indigestable, by deadening the sensation so as to check peristalsis or irritating the nerves so as to cause violent contractions, and yet we go on "adding insult to injury" until the digestive system refuses further imposition.

Te cost of living has gotten so high that the man of moderate means must keep his mind at such a tension that he has but little time to spend at meals and no time to wait on digestion. The modern boarding house is replacing the old fashioned home and is offering a haven of rest to women who have a sufficient income to live without work; yet every man or woman must have some occupation; hence these women usually spend their time at bridge whist, gossiping or comparing their ills, and sooner or later become dispeptics, then nervous wrecks.

The club house is offering the same thing to men who don't have to work. Competition even in the social world is so great that men and women of means and no special vocation, vie with each other in eating and drinking.

So we eat many times at railroad speed, many things that are not food, often when the system does not demand it, and in quantities far too great for the digestive organs to manage it. We eat and drink because others are eating and drinking, sometimes because it is pleasing to the eye or tempting to the palate, but repugnant to the system,

So the curse of Adam has been handed down to the sons of Eve.

APPENDICITIS.

Observations and Deductions Drawn From the Histroies of One Hundred and Thirty Cases That Came to Operation.

By W. Downdes Peple, M. D., Richmond, Va., Asst. Professor of Clinical Surgery, University College of Medicine, etc.

When I first heard the assertion that appendectomy constituted one-fifth of all the operations done by the general surgeon, I did not believe it. Investigation and enquiry, however, proved it to be correct, and this subject immediately took on a new element of interest. It occurred to me that a careful reading of the records of a number of cases might bring out other facts of interest, and possibly of value. When once a subject is mastered, we, Americans, are rather prone to toss it aside and to pass on to newer, bigger and more difficult problems and to bend our energies in solving these.

Theoretically and intellectually, we have mastered the problem of appendicitis. We know just what to do and, better still, we know just when to do it. But are we following the rules we have formulated? Have we finished educating the laity in regard to this disease? Why is there still a high mortaity if we know what to do and when to do it? In what class of cases is the mortality highest, and how can this be reduced? In

Read before the Richmond Academy of Medicine and Surgery, February 28, 1911.. sity College of Medicine, etc.

what class of cases do complications and sequelae occur? What becomes of the cases not operated upon? These and many other questions crowded in upon me insistently demanding answers.

Therefore, I took from my own operation records 130 consecutive cases of appendicitis, omitting appendecomies done in the course of other abdominal work, regardless of the condition of the appendix. Endeavoring to make the facts answer some of the foregoing question, I made the following headings:

1. Number of sub-acute, chronic and interval cases.
2. Number of acute cases not drained.
3. Number of acute cases doubtful and drained for safety.
4. Number of acute cases drained for abscess.
5. Number of acute cases drained for diffuse peritonitis.
6. Number of attacks recorded in each case.
7. Number of hours, in all acute cases, elapsing from the earliest symptom to the hour of operation.
8. Early and late complications in each class of cases.
9. Deaths, and the class of cases in which they occurred.

There were 50 sub-acute, chronic and interval cases; 26 acute, not drained; 4 acute, drained for safety; 18 drained for abscess; and 29 drained for diffuse peritonitis.

From this it wil be seen that 80, or about 60 per cent. of all cases were acute, while only 50 availed themselves of the interval or were operated upon when the symptoms were subsiding.

Fifty-one cases, or about 62 per cent. of all acute cases, had to be drained.

The average length of time from the earliest symptom to the time of operation was 27 hours in the acute cases not drained; the longest time was 96 hours; the shorest, 8 hours.

The average length of time in the abscess cases was 100 hours; the longest being 11 days, the shortest, 12 hours.

The average length of time in the cases with diffuse peritonitis was 70 hours; the longest was 7 days; the shortest, 20 hours.

The total number of attacks recorded for the 130 cases was 262. This would undoubtedly be much larger had this item been more closely ascertained in the earlier histories, as one attack only is credited when no mention is made of the number of attacks; 62 cases are recorded with but one attack. It took 200 warnings to drive the other 68 patients to the operating table.

If there is one generally accepted rule in this disease it is to operate early to save life, to save complications, to save expense and to save time spent in bed. How are we keeping this rule which we ourselves have made and all recognize? 62 per cent. of all acute cases too late to close the wound—51 out of 80; 18 cases had abscess, and 29 diffuse peritonitis. Let us look to see whether it was the severity of the type of infection, or was it, rather, a question of time? The average duration of acute cases closed without drainage was 27 hours; for diffuse peritonitis, 70 hours; and for abscess, 100 hours.

There is no one who appreciates the many varied obstacles to early operation more fully than I do, and I have given much serious thought to this phase of this great problem. For the greatest good to the greatest number we must have one rule: Operate in every case as soon after the diagnosis is made as possible. Fix some limit, say 24 hours, and work with this goal in view. With something definite to work to, we will operate earlier, save more lives, and drain fewer patients.

In the first 24 hours, the fight is to save the abdominal wall, to close it neatly and strongly for the early resumption of work. The passing of the second 24 hours, in those cases which grow progressively worse, marks a dramatic crisis; all minor considerations sink into insignificance. It is now a fight for life. It has seemed to me that too much stress cannot be laid upon this element of time. There is no more danger in removing an inflamed appendix than a quiescent one. Many an appendix has rupturned waiting for this fancide golden interval which did not come.

Again, why should a man lie abed for a week recovering from appendicitis when he could, with no more discomfort and far greater security, be recovering from an operation for its cure?

Let us turn back to the figures and see if they bear out these statements. Of the 29 acute cases closed without drainage, all recovered without complications or sequelae. The 50 interval cases did likewise, and be it remembered that many of these were sub-acute; the organ still markedly inflamed, but operation was done to guard against a possible rupture and to save loss of time in bed. The four cases drained as a means of safety, all recovered without complications or sequlae. This leaves all the complications, sequelae and deaths to the two remaining divisions, abscess and peritonitis cases.

Of the 18 abscess cases, 2 died; one from rupture of a second abscess not discovered at the time of operation; the other from a progressive peritonitis. Of the 16 who recovered, 2 have small herniae and one was operated on for sub-acute obstruction caused by adhesions about the cecum. The average duration of these cases, be is remembered, was 100 hours.

Of the 29 cases of diffuse peritonitis, 8 died. Of the 21 who recovered, one had acute obstruction on the 10th day, which fortunately righted itself. Two have small herniae which give no trouble; and one was operated upon for a large hernia. The average duration of these peritonitis cases was 70 hours. Three of the 8 who died were children.

To again refer to the element of time in its relation to mortality and morbidity, all deaths have been in cases of more than 48 hours duration. Operations done for appendicitis while it is still appendicitis should have no mortality. Operations for appendicitis while it is still appendicitis, should have few, if any, complications or sequelae, and a definite period of convalescence of two weeks. Operations for appendicular abscess and diffuse peritonitis are attended by a death rate high at best, but increasing with every hour of delay; and for those who recover, a long, indefinite, painful, expensive convalescence, with a possibility of obstructive adhensions, and a probability of hernia in the weakened abdominal wall.

What are we going to do about it? Is there any way of reducing the mortality with conditions as they are? With the introduction of the Fowler-Murphy-Ochsner treatment after operation, we seem to have reached our limit of life-saving in these late cases. But there is still one possible means by which a further gain may be made. It is by working out a correct symptomatology in appendicitis in young children. I do not recall a case of appendicitis in a child under five years of age operated on before rupture, and I have heard men of wide experience make the same statement. What does this mean? It means that a child with appendicitis presents no such train of symptoms as the adult, and it is only after rupture and the development of peritonitis that the symptoms of the two approach and parallel one another. Children stand peritonitis badly. Three of my 8 deaths from peritonitis were in children; other operators report the same high death rate. It is therefore, imperative that we diagnose these cases earlier if we are to hope for improvement in this class of cases.

I note that three of my cases in older children who recovered, occurred during attacks of acute tonsillitis. A visiting physician once called my attention to the frequency with which appendicitis followed attacks of measles. Here, we have two clues to follow. The lymphatic tissue of the appendix becomes involved just as do the lymph follicies of the tonsils in tonsollitis and measles. Let us watch our children more closely during the acute infectious diseases; let us look for abdominal symptoms early and view them anxiously and critically until a correct symptomatology is noted and recorded for all men.

Among the peculiar turns and vagaries of this disease may be mentioned the case of a little girl of twelve who presented a moderate sized, well-defined abscess internal to the cecum and not adherent to the abdominal wall. She had experienced some discomfort in the abdomen for a week, but had not lost a day from school. The family physician was called in on discovering the lump, and he brought her immediately to the hospital.

While most of the perforative cases and many others have contained fecal concreticas, the only real foreign body I have found was a number 6 shot, probably eaten with squirrel or rabbit.

A rather puzzling abscess case was in a very fat woman known to have a large tape worm. I first expelled the worm with pelletierin, and then removed the appendix and drained the abscess.

A diagnosis that most keenly interested me was one of acute appendicitis complicated by an inflammation of the right ureter. I had not seen this diagnosis made prior to operation before, and it was with great satisfaction that I peeled the appendix out of a soft bed of fresh inflammatory products just over the course of the ureter, and with keen interest that I watched the ureteral calls, pus and blood corpuscles grow daily less and less and disappear.

As to appendicitis not operated upon, I think I can recall most of the cases I have seen. One had a typical, well-marked attack thirteen years ago, and has had no subsequent attack. One declined operation and has since been lost sight of. Another declined operation during his first attack, recovered, and had a narrow escape in a second attack for which he was operated on six weeks later. There was a boy with a history of one previous attack, whose parents are waiting for a third.

A rather unique case gave birth to a seven-month's baby five minutes after getting into the hospital after a 40-mile railway trip. She had a well-marked, sharp attack, but I felt justified in waiting under such peculiar circumstances. Her courage subsided with the inflammation, however, and she declined operation. I made a careful pelvic examination before she left, and found her tubes perfectly normal, thus eliminating this source of possible error. A year has now gone by and she has had no subsequent attack as for as I can learn.

One case of a large abscess that ruptured I declined to operate on as the man was cold up to the waist and practically moribund. He lived eight hours.

A particularly interesting case was an acute perforative appendicitis which occurred in a hospital, in a young man suffering with pleurisy and bronchopneumonia. He gave a history of previous attacks of appendicitis. Operation was advised and declined. He fought out the pneumonia and died of peritonitis some four or five days later.

A most pathetic case was that of a young man in poor circumstances, with a wife and several children, who, on account of deep religious convictions, would not call in a physician. He suffered with pain for four days, and actually walked about for two or three more with well-advanced peritonitis. I was called in the day he was seen by a physician, and advised the continuance of the Ochsner treatment which he had inaugurated before my arrival. This prolonged life several days, whereas I am con-

vinced that an operation would have terminated it in a few hours. This is the only case of diffuse peritonitis in which I have used the Ochsner treatment.

As to this method of treating diffuse peritonitis inaugurated by Ochsner, it is my experience and observation that it is a most estimable post-operative measure, especially coupled with the Fowler position and the Murphy method of giving saline. If substituted for operative treatment it will unquestionably improve one's operative statistics. There is a phase to it, however, of great practical importance and yet, seldom referred to: It is the crippled condition of the abdomen resulting from the inflammatory changes in those cases that do recover. I recently assisted in an operation on such a case, and I could but compare the abdomen to a well-ordered farm that had hastily been converted into a battlefield. The fences are thrown down, the orchard is cut away, out-buildings have been burned, fresh earthworks run across the wheat field; the roads are demolished, the soil is ripped and torn, and everywhere, from garden to pasture, is seen the gaping scar of hoof and tire. It will make a fine place for another battle tomorrow, but it will never be a decent farm again.

1000 West Grace Street.

The Dispensing Physician.

By Dr. H. C. Buck, M. D., Friars Point, Miss.

While it may not be known to the majority of the members of the Medical profession, it is a fact never-the-less that the number of physicians who dispense their own medicine is increasing rapidly. There is another fact seemingly not generally known and that is that the Retail Druggists are organized into what is known as "The National Association of Retail Druggists," whose prime object it would seem is to suppress the dispensing doctor. In some of the states there is almost open war between the physicians and the retail druggists and the druggists are making strenous efforts to have laws enacted to prohibit a physician from dispensing under any circumstances and compelling him to at all times send his prescriptions to the retail druggist. The N. A. R. D. has an article printed for free distribution by the druggists. This article starts out as follows: "When you are sick and seek medical relief, who would you rather have to make your medicine for you, a person who is skilled in that art and who has made the art of preparing medicine his life study, or is any inexperienced person good enough for you?" Meaning the dispensing physician, who in the opinion of the N. A. R. D. are all inexperienced persons, again, "Pharmacy laws are intended for the protection of the public, but in some inconsistant manner all doctors are exempt from these laws, this at first may seem perfectly proper, but every really high class physician knows that such power should never have been given to the members of the medical profession, nor will these high class and intelligent men take advantage of it by dispensing their own medicine, because they know they are not fitted for it either by experience or education." Another argument they use in this article is "you get pure medicine," Why! because the dispensing doctor is not honest and "the only thing he knows is that he can buy cheap and so make more money out of his practice. He cares not so much for his sick patient as he does of the amount of money he can squeeze out of him, otherwise he would do what every right minded physician does, write a prescription for what ever he should have." Oh ye Gods, again, "Every human being is liable to make a mistake, and if your doctor makes a mistake it may cost a life and you could not even sue the doctor for murder, therefore if you employ a doctor who writes prescriptions and he should make a mistake, the druggist is sure to discover it and danger or injury is avoided, for to the credit of the druggist be it said, that seldom has one made a mistake that has resulted fatally. Can the doctor who gives his own medicine say this? You can answer for yourself." We quote from an article by Dr. Christopher Koch, Vice President of State Pharmacutical Board of Penn. He says, "There has been a marked increase in the number of physicians who dispense their own medicine; they aver that they can keep better track of their patients, be sure of giving pure drugs and prevent the gratuitous circulation of their prescriptions." Evidently Dr. Koch thinks the doctor prevaricates, for he says, "The truth of the matter is that the dispensing doctor furnishes his own medicine in order to compel the patient to return for more, he gives a five or six days supply and the patient if he wants more must return and pay another fee." Why not to the doctor as well as to the druggist. But does the physician misrepresent the matter? How often does the physician that writes prescriptions have a patient visit their office, get a prescription and never return, but you hear of the druggist filling this prescription and refilling it repeatedly, not only for the original patient, but for that patients friends and relatives to whom he has recommended the medicine, does the druggist refuse to fill the prescription, or does he or the person who gets the medicine offer to pay the doctor for so appropriating his knowledge? Perhaps they do, but I have never heard of a single instance where

they did, In its great anxiety for the welfare and protection of the general public and incidentally to suppress the dispensing doctor. "The Western Druggist" proposes that the N. A. R. D. pass a resolution to the effect that, "whenever a physician dispenses his own remidies and thereby assumes the functions of pharmacist, he shall deliver to the patient a prescription of the remedy or remedies he intended to prescribe and that in cases of fatal termination he shall not be authorized to issue the death certificate, but the proper health officer shall certify the cause of death." A medical Journal, The American Journal of Clinical Medicine, for Sept., commenting on these resolutions says: "In other words, if you should be called to a patient *in extremis* and should have the temerity to endeavor to save his life with remedies you might have at hand (instead of sending around to the drug store for something)and the patient should die, then a coroners inquest and an autopsy would be in order, to determine whether you killed the patient or not."

Very recently I was called four miles in the country in the night to see a woman suffering with general congestion, I found her speechless, almost pulseless and unable to swallow anything. By the prompt use of the proper remedies which I had the temerity to carry with me, I succeeded in saving the woman's life, but suppose I had been forced fo send four miles to the nearest drug store for the remedies, what would have been the result? In these cases time often means a human life and every minutes delay increases the danger.

According to the articles, parts of which I have quoted, the inference to be drawn is, that no matter what may be the social and professional standing of a physician, when ever he begins to dispense his own medicine he becomes a liar and a dishonest man who has no regard for the welfare of his patient but is solely after all the money he can squeeze out of him, not only this, but he becomes a professional abortionist, for Dr. Koch says, "and the chances for abuse of the doctors immunity from supervision are by no means wholly neglected. I need mention only one notorious abuse, that of eminagugs, numbers of doctors by emagogue tablets. used for the purpose of averting births, in 5000 and 10,000 lots," Of course no man, woman nor child ever knew or heard of a retail druggist who sold such things except when prescribed by a physician and then it was done under protest. Everyone knows there are unprincipled men in every profession or walk iu life, the Medical profession is not exempt, but I *know* that in honesty, morals and all the characteristics that constitute a high minded honorable gentleman, the great majority of the members of the Medical profession stand the peer of the retail druggist, or any other class of men, not excepting the clergy. For many years I have dispensed my own medicines, why? Before I adopted this plan a patient would rarely visit my office more than once, he would take my prescription to the druggist and have it filled and refilled as often as he thought necessary, not only would he do this, but often he would give it to his friends and they would go to the druggist and get it filled and sometimes the druggist would recommend and dispense it. Since I have been dispensing my own medicines my patients not onfy come to my office to get their prescriptions refilled but very often bring or send fheir friends to me. A great many people are sensitive regarding their bodily ills and do not want written prescriptions, claiming it causes more or less publicity to take a prescription to the drug store. This may not hold good in large cities, but it is especially true in small towns, where as a rule people pay more attention to the business of other people than to their own. I often have ladies come to me for treatment and give as one of their reasons for doing so, that as I prepare and furnish my own medicine then the druggist nor any one else knows what they are taking and often no one knows they are under treatment at all. In this section we have quite a number of so called social diseases. I do a large percentage of this class of practice because the patient can come to my office privately get his medicine in the office and no one knows of the transaction.

X-Ray Diagnosis.

By A. L. Gray, M. D., Richmond, Va., Roentgenologist to the Virginia Hospital and St. Luke's Hospital, and Instructor in Roentgenology at the University College of Medicine

It is not my purpose in this paper to attempt to enumerate the conditions in which the X-rays may give valuable information, but rather to point out the various ways of employing this agent in order to obtain the most accurate data on which the diagnosis may be based.

The Roentgenologist is often accused of showing imaginary objects, and of arriving at unwarranted conclusions, but to one who makes a special study of interpreting lights and shadows, every variation in the density

*Read before the Tri-State Medical Association of the Carolinas and Virgia, Feb. 22-23, 1911.

of the negative or print bears a distinct significance.

Since the discovery of the dangers attending the lack of proper self-protection, the use of the fluoroscope by X-ray operators has been largely abandoned, and the safer method of diagnosis by negatives has been employed to a much greater extent.

There are a few conditions about which a fluoroscope will give decidedly more information. These conditions, however, are fortunately not of sufficiently frequent occurrence nor is the additional information derived by a fluoroscopic examination of enough value to warrant the even occasional use of the fluoroscope, unless proper safeguards are employed.

The methods that may be made use of for the protection of the operator during a screen examination consists in enclosing the active tube in a ray-proof boox or other appliance, an opening having been so placed that the field of irradiation is definitely limited thereby. In addition to this box, the fluorescent screen should be covered on the side toward the operator by the thickest sheet of lead glass that can be used without interfering with the clearness of the shadows on the screen.

Further protection may be obtained by the use of lead glass spectacles and ray-proof gloves. By placing the patient in front of the window in the protecting box prior to the operator assuming his position, the danger may be greatly reduced, though by no means entirely abolished. Another method of fluoroscopic examination with decidedly greater safety to the operator is to arrange a system of mirrors so that the images upon the fluorescing screen may be reflected to the eye of the examiner while a heavy lead screen is interposed between him and the active tube.

The examinations for which the fluorescent screen is especially desirable are: First, for aneurysm; secondly, to trace the course of bismuth through the alimentary tract. It is true that rapidly moving bodies may be seen and distinguished more accurately upon the screen than upon the negative. The simple and convinient method of studying a condition by the handy little instrument that was thought to be an essential part of every X-ray equipment has already caused the death of a considerable number of the foremost of our pioneers in this work.

A carefully made negative of an aneurysm will often show the double outline caused by the distention in all directions of the walls of the sack. Again plates made from different positions will give information only slightly less reliable than the screen image. With the modern high-power machine it is possible to make plates of almost any portion of the body of the average individual within one second, and with the automatic plate shifting devices that are now being perfected by the instrument manufacturers, it is a question of only a short time before cinematographic X ray pictures will be brought into practical employment. This method of examination has already been well started both in this country and in Europe. For the immediate future, however, the most valuable practical examinations are made by the employment of two negatives exposed from different positions and viewed by means of some form of stereoscope. The well known flatness of an X-ray picture is done away with and an accurate perspective is obtained, the value of which can only be appreciated by those who have employed this method. It is in this direction that the greatest progress in Roentgenology has been made in the past few years. The manufacturers are now furnishing us with equipment by which the necessary plate changing, tube shifting, and exposures may be made within the period of from one to five seconds. Stereoscopic pictures of the chest may be easily taken while the patient is holding the breath, and thus all blurring incident to respiratory movement is abolished.

It has been said that sheet lead and bismuth are to the X-ray specialists what cotton and gauze are to the surgeon.

The beautiful demonstrations of the value of the insoluble salts of bismuth is determining the presence, location, and extent of various sinuses and other cavities within the body are more or less familiar to us all through the work of Dr. Carl Beck of Chicago. In certain locations where bismuth injections would be undesirable, the use of solutions of some the non-irritating salts of silver will be found a very satisfactory substitute. It is entirely possible by the use of a 15% solution of collargol or a 25% solution of argyrol injected through the ureteral catheter, to demonstrate the shape, size, and position of the pelvis and calices of the kidney, and also the position of the ureter. From a careful study of the shadows made by this solution the presence of abnormalities in these structures can frequently be ascertained.

The matter of X-ray diagnosis is one continuous series of manoeuverings to obtain the greatest amount of information with the highest degree of accuracy. It is so easy to distort images or to cast shadows that may lead to error that the roengenologist is kept continually on the *qui vive* lest some apparently trivial deviation from the

proper technique lead him astray in his interpretation.

In a recent case, which was referred to me to ascertain the presence or absence of a fracture of the lower jaw, the first impression led to the belief that there were two distinct fractures: one extending downward through the socket of the right canine tooth and the other obliquely downward and forward just behind the last molar. A closer examination of this plate showed the second supposed fracture to be the interval between the articular processes of two adjacent cervical vertebrae. What appeared to be a distinct fracture in the maxillary bone was, in reality, a perfectly normal condition in a portion of the body a considerable distance away.

There is, perhaps, no better method of determining the presence or absence of a fracture of the long bones than that which has been employed for many years: viz., making two pictures exactly at right angles to each other. Various devices have been employed for this purpose: such as right angled frames to which an extremity may be strapped, and rotated through 90°.

By way of convenience and economy the two views may be made on a single plate by protecting the part of the plate that it is not desired to expose, by a heavy sheet of lead. Wherever it is impracticable to obtain right angle views, stereoscopic pictures will be found to give the greatest satisfaction. It occasionally arises that the shadow of a foreign body of approximately the same density as the tissues which it displaces and which does not cast a shadow when the rays are directed through the denser tissues, may be made to appear distinctly by directing the rays through structures less dense. It is especially important to bear this in mind in searching for calculi below the brim of the bony pelvis. It has long been my custom, when exposing the plate of this region, to place the patient in a semi-sitting posture and to direct the rays parallel to the axis of the pelvis. In this way the shadows of the pubic bones as well as the sacrum and ilium are thrown well out of the way, and the calculus shadow, if present, will appear in the midst of those made by the soft structures.

In closing, I should like to emphasize: First, the importance of a careful study of the radiograph, and if an abnormality is suspected, consider every possible normal condition that might account for the presence of what appears abnormal; secondly, form your opinion, if it is well grounded and maintain it until proved incorrect.

There is nothing of more value than a correct X-ray report and nothing more embarrassing than the lack of a definite conclusion.

The Possibilities of the Blood Clot.

By Lucien Lofton, A. B., Ph. D., M. D.
Emporia, Va.

Mr. President and fellows of the Tri-State Medical Association:

In bringing to your attention the possibilities of the blood clot in surgery, I desire to say that my remarks will be shorn of any semblance of theory.

Of course, I fully realize that knowledge of value is ofttimes gained from men who originate an idea by those who follow them in an experimental capacity.

Indeed do I fully recognize that without the theorist, surgery today would not hold the advanced position it does in the scientific world. But to theorize altogether and fail to crystalize and make practical one's thoughts, is like chasing a shadow and running away from the substance.

To my mind, the value of the blood clot is not fully and generally recognized in reparative surgery. It is true a decade ago, some experimental work was done by two or three able surgeons in the South, by attempting to replace as an example, amputated mammary glands, but outside of this particular phase of repair work, little or nothing was done toward utilizing the blood clot. Medium success was obtained toward establishing healthy tissue in the above connection, but owing to the many repeated failures, the proposition was abandoned. My idea why the blood clot was not a distinct success as outlined in the foregoing experiments, was due more or less to the faulty technique.

When I began to use the blood clot for for the purpose of replacing expended tissue in 1897, I frankly admit, that all my cases were far from being satisfactory to the last degree. But, holding on tenaciously to the opinion that nature, despite its helplessness in the hands of the surgeons, would prove master in the end. I persisted in the belief that the blood clot was not at fault, but that the operator was without proper technical skill.

When, in 1900 I at last had solved the problem of how to use the blood clot, the results obtained, astounded me.

To outline briefly the method that I have used for the past ten years will no doubt be of interest to this gathering.

To illustrate: a patient comes to you with one or more fingers crushed, cut, torn, bleed-

*Read before The meeting of the Tri-State Medical Association of the Carolinas and Virginia, Feb. 22-23, 1911,

ing and apparently lifeless. Of course, upon first blush, many will naturally conclude that the easiest, the quickest and the safest procedure is to amputate, trim the fragments, sew together the flaps, dust or an antiseptic powder or dash the wound with a liquid antiseptic, roll on a hurried toilet, give the man a prescription for a narcotic, and tell him to report at your pleasure. This may be excellent surgery, a rapid fire display of technique and a reputation getter for the surgeon, but on the other hand go a little farther and state that the patient's skin is cut, crushed and lacerated that the carpal and metacarpal bones are crushed, that the joints of his fingers are ground into a state of pulp that the flexor and extensor tendons have been torn asunder, that it would indeed be a favor to the man to relieve him of his dangling digits in the face of impending septic infection. But when I explain to you that without the aid of the torturing scrubbing brush, minus the repeated ablutions of hot bichlorid, phenol or saline solution, I take this man and restore to him good serviceable fingers, I feel that this statement will carry with it a degree of unbelief upon your part. The method I use is simple, safe, sane and conservative. Pouring immediately over the injury a solution of equal parts by weight of camphor gum and phenol crystals, which, by trituration produces a heavy oily liquid, this preparation owing to its density and sluggishness penetrates every crevice of an injury. It acts as an analgesic, antiseptic, a hemostatic. At the same time, while a fifty per cent solution of pure phenol is used there is no precipitation of albumin or scalding of the tissues. The next procedure is to mould the torn parts by manipulation, and cat-gut suturing. While you may not be able to find but only a few remaining scraps of dangling tissue, whether they be osseous or otherwise, do not by any means bring your scissors or scalpel into play. Permit each portion to remain. Having shaped the digit, as well as possible, use immediately over the entire finger rubber tissue, which should be perforated at different points, snugly fitting the tissue around the injured finger. Next in order is to put on your gauze loosely, followed by a perforated aluminium finger splint, which should project on the palm of the hand. The following wet dressing liquid is given the patient and told to keep the finger thoroughly moistened and warm. Formolid ounces 4, phenol drops 12, morphine grains 2, distilled water q s. ounces 8. He is told to carry the bottle on his person that it may be kept moderately warm, and to apply as often as needed to keep moist or hold in abeyance any pain he might suffer.

This dressing is allowed to remain intact from 3 to 5 days, when it is removed.

Of course due care must be taken in manipulati ·g so delicate a piece of surgery. Owing to the fact that the rubber tissue, immediately surrounding the integument, there will be no trouble in removing everything in toto, without injury. Upon examination the wound will present practically the same condition witnessed in the solidification of the second stage of pneumonia. You will find if the patient has not bruised the injured finger, that all ragged places have been thoroughly cemented with a nice clean, healthy blood clot. The identical initial dressing is repeated. The patient is told to return in four days, meantime to use the liquid dressing as before.

At the expiration of four days, the patient returns when the second dressing is removed. At this stage of the procedure, the color of the blood clot is likened to the stage of gray hepitization of a recovering lung in the resolution stage of pneumonitis. The clot has taken on a firm feeling which may be palpated with the sterile finger. Its consistency is about that of congealed home made jelly—being flexible but not pliable. Over this is dropped a small quantity of the camphor-phenol liquid. The rubber tissue being placed after being perforated as in the two former dressings. The remainder of the toilet being as outlined above. At the expiration of three days, I remove the third dressing and cover the entire wound surface with an antiseptic powder unusually Iodoformal. This is covered with the perforated rubber tissue and dressed as usual, remaining intact for one week, at the expiration of which time, the finger is cured that many will recognize, as we preserve hog meat in the South. You will notice in the last two dressings the liquid antiseptic solution was omitted, the reason being that after your blood clot has become thoroughly established, that this is not necessary. Within four to six weeks the wound has been fully repaired, having with the blood clot replaced all expended tissue, such as integument, arteries, veins, nerves, ligaments, and bone. Naturally you may ask if it is really a complete reparation. When I say that the patient has the tactile sense replaced, flexion and extension established, that the circulation is fully restored, that I can palpate a new osseous formation, then I must conclude that a complete restoration has been effected. It is true where joints are injured in these cases of minor surgery, that incomplete anchylosis is to be reckoned with. This may be overcome by the inunction of olive oil, massage, and superheated air.

It may appear unreasonable to you when

I make the statement that it is a frequent occurrence, that where fingers have been cut in twain and permitted to fall to the earth, that the stubs are cat-gutted in proper approximation to their fellows, and under the wet dressing and blood clot, are successfully grafted into position and made to become useful members, notwithstanding the fact, that no attention is paid to bringing the tendons together, the blood clot bridging over the space caused by the retraction of the ligaments. In one instance a severed finger had lain in the sawdust one hour before being replaced.

I wish to assure the members of the Tri-State, that antisepsis and asepsis in surgery is almost a prayer book to me. But when I tell you that it is cruel, unjust, inconsiderate and lacking of due regard for the pain suffered by a man with a mangled hand, to wash, scrub and squeeze his wounded flesh, conscientiously believing it is done in the cause of true twentieth century surgery, when by omitting all this unnecessary torture, merely wiping away the macroscopic filth with which you have to deal, I say I feel that it is totally disregarding the patient's welfare, if you have something that acts better and gives to him what he has unfortunately lost and which may be given by the method which I have attempted to explain if the patient is not considered. We all know that it is quick surgery to amputate. But let me remind you that each and every finger that is lost to a man who earns his living with his hands, that so much of his earning capacity goes with the destruction of his digit.

I believe reparative surgery or cosmetic surgery, has a field peculiar to itself, which which today has been sparsely invaded. The blood clot has not played its stellar role, as yet. But it is my candid opinion as we advance, and become more simplified in our technique, that the blood clot will fill up scores of crevices where now abide the scalpel and the saw. Too much water on a granulating surface, excessive handling or meddlesome surgery of an injured surface will cause untold complications, and by this I would mean that to bathe or irrigate a healing surface is merely a matter of destroying the delicate granulations which spring up between dressings. I have repeatedly noticed wounds of flesh and bone kept from healing for weeks and months, by this unpardonable method of attack. The so called laudable pus of our forefathers, is really more acceptable in the present light of our knowledge, than is the inexcusable tare-down and break-up procedure which we are wont to witness in this pseudo-enlightened surgical age. By all means assist nature, and not carry on a guerrilla warfare. That the blood clot will replace and cement muscular tissue is a fact. That is to say, destroyed muscle can be duplicated, likwise its sheath. This I have done with the larger muscles of the thigh, the arm, and the forearm.

When I call to your mind that with the blood clot, I have built onto men's fingers, as much as an inch, of servicable finger, in other words, the finger to grow, as would a plant to this extent, by using the blood clot, I feel that the day is not far distant when surgeons can by the method herewith explained, cause to grow, practically a new finger by the blood clot, that is to build the finger by a repeated imitating process, building clot on clot, and flesh on flesh.

I do not wish you to think I am impracticable when I make the foregoing statement for I have scores of cases in Emporia that are living testimonials of what I say is true. I will cite three cases of recent occurrence in which I hope to demonstrate the possibilities of the blood clot.

CASE NO. 1.

Mary Hurta, white, North Emporia, Va., age 10, while attempting to get on a mowing machine which was in motion, fell beneath the blades when the ankle was practically severed with the exception that the foot dangled by a twig of flesh on the anterior aspect of the leg approximately a half an inch in width. This accident occured at 10:30 a. m., in June, 1910, seven miles west of Emporia. The child was brought to town when, at five o'clock with the assistance of Dr. J. T. Davis, of North Emporia, Va., she was anaesthetized with chloroform and prepared for operation. The foot was apparently lifeless. My assistant insisted upon an amputation. I frankly demurred to his opinion, and concluded that the blood clot under the wet dressing could be made servicable, that the opportunity was before me. The place of injury had been terribly chewed as it were, by the teeth of the mowing machine. The tendo-achilles or ham string, other ligaments and bone were badly crushed and cut. Owing to the nature of the injury the great toe of the child's foot could almost be brought in contact with the knee cap, when I attempted to raise the dangling foot in the process of cleansing which I proceeded to do with a normal salt solution. With cat gut, the flexer and extensor ligaments were approximated as best I could. The tendo-achilles, which had been badly damaged, was drawn as closely together as possible with silk worm gut, using two parallel strands. The skin was sutured with a No. 2 fiddle string. Over the wound a goodly amount of the camphor liquid was

poured. Immediately following this, perforated rubber tissue was applied, and the wet dressing followed. Latteral veneer splints and gauze bandages completed the first dressing. At vantage points, hot water bags were kept continuously to the foot and leg. Four months from time of the injury the little girl threw away her crutches and began the normal use of a thoroughly repaired leg and foot, with all faculties restored. Today she walks without any impediment and has made a complete recovery. This I regard as a grafting process entirely due to the blood clot.

CASE NO. 2.

Clarence Edwards, white, Emporia, Va., employee of the Emporia Sash and Door Co., in October. 1910, lost the little finger of the right hand, one quarter of an inch anterior to the metacarpal articulation. The ring finger was severed immediately in front of the second articulation and likewise the second finger approximately at the same joint. This accident was upon the left hand.

I could not find the amputated fingers, but with the blood clot three quarters of an inch was given him on the first finger mentioned and practically an inch each of the other two fingers cited. This was accomplished in about four and a half weeks.

CASE NO. 3.

Humphrey Davenport, white, a saw mill operative living near Emporia, sustained the loss of his index finger midway between the second and third articulation by having it drawn into a planer.

The man immediately placed his stub in a bottle of hygrogen dioxide which he happened to have. Removing it from the solution, a course cloth was thrown around the injured digit as he explained to stop the flow of blood. I was summoned to the Emporia Hotel by Colonel H. W. Weiss, where I saw ihe injured man four hours after accident. Owing to the fact that the December weather of 1910 being crisp, within the clot a beautiful blood clot the size of the man's finger had been formed. This cloth was seven eights of an inch in length. Nature here offered a suggestion that was absolutely in line with the work in hand. Taking advantage of the splendid opportunity, I gave the patient the benefit of the blood clot and the wet dressing. Today without close scrutiny you cannot tell that the man has ever been injured. He has had an uneventful recovery, and while I cannot reason the proposition as he does, he insists that a new nail is forming at the usual place. This is evidenced by a rough cartilaginous substance growing over the end of the finger. What I have said I can prove, and I have overstepped the bounds of propriety in mentioning names. This I have done for no other purpose than to emphasize the statement made in the opening paragraph; that my remarks would be shorn of any semblance of theory.

I contend that if surgery is not practical, it falls short of its usefulnes; that reparative surgery must be more devoutly considered; that the possibiiities of the blood clot should call to attention the conscientious performer of deeds; that while the knife is quick, the blood clot is no less important than the steely decision of the man who is looking for a record, and not results.

Preliminary Report of Cases of Syphilis Treated With Salvarsan or "606."

Thomas B. Leonard, M. D., Richmond, Va.

In submitting this preliminary report of cases treated with 606, I will allow the cases to speak for themselves, offering no comment as to the possible value of the remedy; too many misleading statements having already been made, because of premature judgment. The cases included in this series are the first ten cases treated in my private practice. Eight having received the intamuscular suspendion and two the intravenous solution, three patients received both the suspension and the solution.

It is noteworthy, considering the uniformity of results in these cases, that the method of preparing the drug has not been varied. When the intramuscular was considered the method of choice, the process recommended by All for preparing the remedy, was consistently followed. Likewise, when the intravenous was the mode of election, Schreibers clear alkaline solution was used withou modification. It may not be out of place here to state, that the combined intramuscular and intravenous method of injection has become very popular and no doubt will supplant the single form of administration in the future.

Of the men who have had the largest experience with "606" including Wechselman, Ivenson, Michealis, Wolbarst and others, Schreiber has been the most successful. Of a series of over a thousand cases, improvement has been marked in every one and cures reported in a large percentage. In like manner, Fordyce who uses the same method as Schreiber, treated 200 cases more or less, with remarkable success. My opinion is that the unvarying success following the method used by these men, in so large a number of cases, is sufficient evidence to justify a widespread adoption of the Schreiber method of preparation.

In a series of ever a thousand cases Wechelman has been fairly successful but not uniformly so, as Schreiber has been.

Indeed, a perusal of the literature will show that wherever individual whims of

operators are allowed to figure in the perparation of the drug, the reports are to the same degree, unfavorable. Erhlich recommends the alkaline solution as used by Schreiber and the alkaline suspension as prepared by Alt, according as the remedy is to be used by intramuscular or intravenous injection.

In the accompanying cases as well as in 20 others observed by the writer the methods of administration mentioned above has been adhered o, religiously. The literature is so full of processes employed in mixing salvarsan that it is scarcely necessary to repeat them here. Briefly, the method of Schreiber is a sfollows: triturate 0.6 grm. of salvarsan with about 20 minims of 15 per cent sol. of caustic soda in a sterile mortar; when the powder is well incorporated, add 5 c. c. of sterile water, gradually. The powder should now be completely dissolved when normal salt sol, of body temperature is added to bring the bulk up to 200 c. c. Alt's method is used for the interamuscular injection and consists of dissolving the salcarsan in 5 c. c. of sterile water first, nineteen minims of 15 per cent sol. caustic soda is then added which precipitates the drug into a flocculent material. Trituration is now continued until the preparation assumes the appearance of mustard water. The drug is injected into the muscle in this state, the site being previously sterilized with iodine followed by alcohol.

Report of Cases.

T. C., white, single, male, age 27 years.

Primary sore appeard Sept. 1st, 1910, cauterized with usual result in cases of chancre, got worse. Absorbent powders like sterate of zinc were of little value. Nov. 15th, 1910, patient was referred to me when a Wasserman showed the presence of spirochetis.

At this time, throat was ulcerated to a degree which made deglutition difficult. Tongue was dotted with mucous patches and just posterior to its centre, the papillae raised into condylomatata 1-10 in. above the surface. Several pustular syphilides were noticeable in the scalp. Patient had received 1-4 gr. of protoiodide, four times a day since the appearance of the initial lesion, yet the patches in the mouth became worse. Nov. 23rd. patient received 0.6 grm. of "606" intramuscularly—pain severe for several house after injection but was relieved somewhat by morphia, hypodermatically. Pain and soreness gradually disappeared although one mo. afterwards, patient was unable to cross his legs.

A slight chill together with some rise of temperature and pulse and general malaise fololwed the injection. Two hours after receiving the dose patient remarked that the soreness of his throat and tongue were very much better. I neighteen hours this soreness had entirely disappeared and deglutition was now painless. On the second day the chancre which had become excoriated, again previous to the injection, healed entirely. The induration, however, was not affacted—in fact, it was six weeks before any appreciable dimunition in the hardness could be detected. The condylomatato likewise disappeared very slowly, seven or eight weeks being required for their complete disappearance. At this time, Jan. 7th, 1911, patient reported as feeling perfectly well and had gained in weight several pounds. Jan. 15th Wasserman Negative. Feb. 10th Wasserman negative. Feb. 20th patient was given 0.6 grm. 606 intravenously, without any indication except his anxiety. March 1st, 1911, Wasserman strongly positive. The fact that the Wasserman became positive immediately following the injection is interesting and is explained by Ehrlich by supposing that the larger per cent, say 95 per cent of the spirochetes had been killed by the first injection, the remaining 95 per cent retaining life but having become so enfeebled, as to be incapable of harm. The destruction of this small number of sick spirochetes Ehrlich says causes the positive reaction, by calling forth a new influx of antibodies. This positive Wasserman has been found to be only temporary, however, it being customary to get a persistent negative in early cases after a second dose of the drug. March 16h, 1911, the patient seems to be entirely cured there being absolutely no signs of the disease.

The reappearence of the Wasserman in this case shows that this test is only of relative value in its negative phase. Persistent negatives together with entire absence of clinical symptoms, over a considerable length of time, being necessary to justify a man in declaring a case cured.

Later, however, if experience proves that the Wasserman remains persistently negative in early cases, after two or more injections, the length of time during which the case must be kept under observation will be greatly shortened. In this way, the views held in regard to marriage after contracting syphilis will be changed, so that under modern treatment, six months or a year at most, will be the probation period required.

Case 2.

E. C.—White—Male—Age 32—Married.

Contracted an ulcer of sulcus which appeared to be only a blister at first—repeated cauterization under the impression that lesion was chancroidal in nature caused it to enlarge and deepen till in August sore encroached on glans and formed an ulcer in which a marble could be concealed. Mercurial inunctions and absorbent powders did little good. December 15th, 1910 Wasserman, Positive. December 16th, 1911, 0.6 grm. of "606" given intramuscularly. January 15th, 1911, Wasserman changed from positive to negative—Lesion healed—Gained 10 pounds in weight. March, Wesserman negative—No signs of disease except that there seems to be a permanent loss of tissue at site of lesion, although healed.

Case 3.

H. R.—White—Male—Single—Age 25.

Sore on skin posterior to the middle line of penis occured on December 5th, 1910. Healed in two weeks—marked inguinal and cervical adenitis—January 1st, patient was referred to me. At this time there were several mucous patches on inner side of lower lip. Syphilide was noticeable in groove below ala of nose. No Wasserman. January 4th, 1911, 0.6 grm. salvarsm given the glutea! region with little reaction, save pain and soreness. January 14th, mucous patches and skin lesion entirely disappeared—adenitis somewhat reduced. A beginning iritis noticed on January 4th entirely cleared.—February 10th patient is entirely free from symptoms, but complains of tenderness of gluteii. March 5th Wasserman negative.

Case 4.

R. W.—Age 26—Single—White—Male.

Twelve years ago sore on prepuce healed under treatment in two weeks. Took internal medicine for several months but does not know that it was mercury. Did not have any further illness until April, 1910, when a gland in the right inguinal region became swollen to the size of an egg. July, 1910 Adenitis had disappeared to some extent under bichloride of mercury and local applications of ammoniated mercury. At this time an eruption evidently specific occurred on face and was cured with 5 per cent cleate of mercury. August, 1910, sore throat cured by applications of silver nitrate. January 30th, 1910, Wasserman positive. January 31st, 1911 0.4 grm. salvarsan given intramuscularly followed in a week by 0.6 grm. of the drug into the vein. February 10th, mascular and papular eruption covering body at time of first injection has entirely gone. February 20th, a distinct roseola covers chest and abdomen evidently the result of the drug—patient feels perfectly well. March 10th, 1911 patient has no symptoms of the disease—Gland in right inguinal region scarcely palpable. Wasserman negative.

Case 5.

E. C.—Age 25—White—Single—Male.

Five years ago an ulcer of the prepuce was healed in five weeks under the action of antiseptic washes—took three or four bottles of blood medicine at the time. Received no other treatment until October, 1910 when right testicle was removed for a tumor of unknown character. On January 1st, 1911 tumor appeared in the scrotum apparently attached to the scar made in the removal of the testicle, which enlarged in two weeks to the size of an egg. January 15th patient referred to me when a Wasserman gave a positive result. January 26th 0.6 grm. of salvarsan was injected into the gluteal muscles. January 30th the gumma has reduced in size to that of an olive. March 9th, tumor size of a small cherry. No Wasserman made so far, as the remedy is still active.

Case 6.

J. K.—Single—Male—White—Age 30 years.

November 5th, 1910 initial lesion appeared on the prepuce and healed in a few days. No internal treatment. December 31st, a diffuse nachulo-papular eruption made its appearance dotted here and there with pustules. Patient complains of general malaise, headache, osteocopic pains, more severe at night. January 19th, 1910 0.6 grm. of 606 given in the gluteal regions—eruption begun to disappear and continued to fade till February 20, only a few macules remain. Since that date and up to the present, Marcch 10, there has been no appreciable change in the lesions. The pustular lesions in this case indicate the virulent type of the disease, therefore the patient has been advised to take another dose of the drug.

Case 7.

T. J.—Male—Married—age 27 years—Col.

In winter of 1910 sore appeared over the pubic region which healed in a few days—no noticeable symptoms appeared after this until the fall of 1910, when an ulcer occurred in the same place as the initial lesion and healed after heroic treatment with powdered permanganate of potash. January 3rd, 1911, a keratitis occured after premonitory osteocopic pains and nocturnal headache. Patient referred to me February 5th, when 0.6 grm. of salvarsan was injected inramuscularly. March 4th, Specialist by whom case was referred reports marked improvement in vision and remarks that keratitis has cleared rapidly. This case had resisted mercurial for several months.

Case 8.

E. J. —Female—Single—White—Age 22.

Mucous patches in vagina during August, 1910. Healed in several weeks under treatment with antiseptic washes. October, 1910 macular eruption disappeared under treatment with mercury. December 3d, 1910, 6 grm. of salvarsan given into the muscles which removed the pains that were the only sign of the disease at the time of the injection. March 14th, patient has increased 5 pounds in weight and gave a negative on March 10th, 1911.

Case 9.

G. J.—White—Age 25 years—Male—Single.

Chancre in December, 1910—February 10, 1911 severe pains in shoulder and chest—chancre healed—no other symptoms. February 10th 0.6 grm. salvarsan given—pains disappeared in two hours after the inpection and have not reappeared upt to the present time, March 16th, 1911. Wasserman negative.

Case 10.

J. P. H.—Male—Single—Col.—Age 23 years.

Referred to me February 10th, 1911. Initial lesion more than a year ago. Keratitis has been present for several months and resisted treatment with mercury and the iodides. February 10th Wasserman positive—0.6 grm of salvarsan given intravevously. March 15th patient at work and is reported very much improved by his physician. No Wasserman since injection.

Concerning the permanancy of the cure in these cases, it is entirely too soon to express an opinion. That it is a valuable drug no one will deny at the present time. As to its ultimate position in the armamentarium of the syphilographer, time alone can decide.

At present, it would seem, considering the action of the remed yin malignant syhilis and froms of the disease that don ot respond to the older methods of treatment that it was the most valuable remedy in combating this dreaded disease.

Again, its rapid action upon the spirochetes, causing their disappearance from the blood and from lesions in miraculously short time, favors the belief that "606" will undoubtedly be a valuable adjunct in controlling the manifestations of syphilis, if it does not absolutely cure the disease.

The idea of a therapia sterilizans magna has passed now but that the remedy will cure syphilis in its primary ad secondary stage is the strong opinion of noted investigators. It being undestood of course, that two or more injections are required in the majority of cases.

A good deal could be said regarding the fear of injury from the drug itself. Sufficient evidence is at hand now to disabuse the minds of skeptics concerning its injurious effect. It is unlikely that a remedy used so extensively and for so long a time should at this late date give rise to untoward symptoms.

109 E. Grace St., Richmond, Va.

The Diagnosis of Genital Gonorrhea in the Female.

By Richard N. Duffy, A. B., M. D., New Bern, N. C.

This is a very old subject but we do not know all that there is to be known about it yet. Gonorrhea was common among the Greeks and Romans and in Leviticus, Chap. XV, we find specific instructions to the Israelites in regard to precautions against infection from a running urethra. When one considers that from 75 to 80 per cent of all Gynecological operations today are due to the activities of the ubiquitous little gonococcus, that 50 per cent. of all sterility has its origin in the same cause and that 25 per cent. of all blindness is due to infection of the eyes of the new born babe with gonococci in the birth canal we develop a most wholesome respect for this organism and get some idea of the importance of the disease due to its ravages.

The derivation of the word gonorrhea from the Greek **γονος**, semen and **poid**, flow, is good evidence that the nature of the disease was not at first fully understood. The diagnosis of the disease was not really upon a firm scientific basis until the discovery of the gonococcus by Neisser in 1879.

The celebrated Ricord once made the statement that "a gonorrhea begins and God alone knows when it will end." This aphorism is even more true of the woman than it is of the man. Emil Noeggerath, in 1872, claimed that gonorrhea is incurable in both the male and the female and that even after apparent cure the parties previously infected were capable of infecting their partners in coitus. To this metagonorrheic stage of the infection he applied the term latent gonorrhea. There are men today who share with Noeggerath these pessimistic views. Noeggerath brought a storm of protest upon himself by claiming that fully 90 per cent. of all women had gonorrhea. The estimates of the frequency of the infection in women vary, however, and Sanger puts the percentage as low as 12. Suffice it to say that gonorrhea is one of the most prevalent diseases that afflict mankind and it behooves us to be able to recognize it in its various disguises, and, where possible, eradicate it.

Noeggaerth's view as to the incurability of gonorrhea in women is not the opinion of the majority. It is no doubt true that many women recover entirely from gonorrhea in a few months, as do also an even larger percentage of men; but when we consider that in certain proporation of cases the infected woman may show no appreciable signs of the disease after a most careful and painstaking examination, macroscopical and microscopical, using the methods heretofore available, and yet be able to infect her partner during coitus, we have to admit the existence of that class of cases which he terms latent. From the male uretha, as a rule, the gonococci disappear within six months. Persistence of the gonococci is rare in the male urethra after eighteen months. Very exceptional cases, however, prove infectious for many years. These same statements cannot be made of gonorrhea in women. Many gynecologists confess themselves absolutely unable to set a limit to its infectiousness. There is no disease which is more variable in its onset and its manifestations than gonorrhea in women. The insidiousness of its onset, the natural aversion of the woman to an examination, and our, as well as the patient's deplorable habit of temporizing often combine to produce grievous results.

We should look with suspicion on every case of leucorrhea or painful urination in a female patient that comes under our care, especially if the patient be a married woman. Gonorrhea knows no bounds. Its unwelcome presence is felt in the homes of the rich as well as in the hovels of the poor. Every vaginal discharge and every purulent urine from a female patient should be subjected to careful examination for the gonococcus as a matter of routine. In this way can we hope to approximate the truth.

Not many months ago a patient consulted me for painful urination. She was a married woman in the upper strata of society. Her character was above reproach. Her husband denied having gonorrhea and show-

ed no signs of the disease, and yet microscopical examination of the centrifugalized sediment from the woman's urine revealed the gonococci and it later developed that, in addition to urethritis, she also had vulvitis, vaginitis and extension of the disease to the cervix, the body of the uterus and the Fallopian tubes. She developed shortly after I first saw her a pelvic abscess which required puncture through the posterior vaginal vault and drainage, entailing a long and tedious convalescence. This woman had attributed her symptoms to "taking cold in the bladder," and had used various medicaments on herself for several months before I saw her. Subsequent inquiry into the case revealed the fact that a nurse in the patient's home had a profuse vaginal discharge, for which she was using douches. This nurse had used the patient's douche bag and nozzle followed soon after by the use of these articles by the patient herself and hence the infection.

When one considers the anatomy of the female genitalia he sees that the extent of mucous membrane liable to involvment in gonorrhea is enormous in comparison with that in the male. Thus we have as points of attack the mucous membrane of the uretha, the vestibule, the vagina, the cervix, the body of the uterus and the Fallopian tubes. From the Fallopian tubes the disease may spread to the ovaries and the various serous surfaces in the pelvis, thus adding the dangers of pelvic peritonitis and occasionally general peritonitis, two complications rarely seen in the male. The gonococcus shows a predilection for mucous membranes covered by cylindrical epithelium and hence it is that the order of attack is usualy uretha, cervix, posterior vaginal vault, vulva and the remaining portions of the vagina. The extension to the body of the uterus, tubes, etc., usually occurs later and bears a somewhat analogous relation to the disease in other parts that posterior urethritis i nthe male does to anterior urethritis. The disease in many cases does not go beyond the cervix. In addition to the various glandular structures (structures which are especially liable to attack from the gonococcus) throughout the parts mentioned there are two sets of glands which are particularly important in this connection. These are Skene's glands on either side of the orifice of the urethra and Bartholin's glands on either side of the vulva, opening on the inner side of the labia minora in the sulcus between each labium and the hymen. When the latter glands are chronically inflamed the reddened orifices of their ducts can be easily seen and have long been known in this condition as "maculae gonorrheicae," having been considered important diagnostic signs of chronic gonorrhea.

The pathological agent, the "materies morbi" of the old writers, of this disease needs no description in this gathering and I have taken it for granted already in this paper that the gonococcus and its casual relation to gonorrhea is sufficiently well known by all. The pathological condition itself requires no description here. It partakes of the well known characteristic changes of an inflammatory character caused by a pus forming organism with a marked tendency to glandular involvement and all stages are seen: the acute, the subacute and the chronic.

The symptoms of gonorrhea in women are exteremly variable. The onset of the disease may be very insidious or very acute. The symptoms of acute gonorrhea are in the beginning due to involvement of the urethra and vulva and, in very young subjects, the vagina also. There is complaint of a hot burning discharge, frequent, urgent and painful urination and a sensation of weight in the pelvis. There is usually no fever. The subacute and chronic stages rarely present pronounced typical symptoms. There are perhaps occasional attacks of painful and frequent urination associated with disorders of menstruation, pelvic pains, dysmenorrhea, sterility, abortion, attacks of perimentritis, salpingitis, oophoritis or local or general peritonitis. The patients gradually become neurasthenic and lapse into a state of invalidism. Many cases of gonorrhea in women never pass through the acute stage. The onset in these cases is very insidious. The first indication of trouble may be simply an increase in a previously existing leucorrhea. The patients gradually develop the train of ills enumerated above and lapse into a semi-invalidism.

Gonorrhea in women is, as a rule, a composite picture, a combination of symptoms referable to several different structures. To fully appreciate the composite picture it will be advisable to have a look at its component parts. The symptomatology of the acute and chronic stages of urethritis, vulviits, Bartholinitis, vaginitis, cervicitis, endometritis, perimetritis, salpingitis and oophoritis will therefore be reviewed briefly.

Acute gonorrheal urethritis in the female is attended with symptoms analogous to those seen in the male but the acute stage is much briefer. It is much less liable to become chronic and the severity of the affection is altogether very moderate in comparison with the disease in the male. Burning and tickling sensations in the uretha. frequent, urgent and painful urination associated with a moderate amount of purulent discharge constitutes the symptomatology. In hypersensitive women chills and slight fever may been seen. The urethral orifice is swollen and oedematous and pus can be milked from the urethra.

Chronic gonorrheal urethritis excites few symptoms other than periodic attacks of painful urination. The involvement of Skene's glands at the external urethral orifice favors chronicity and is a frequent cause for prolonged painful urination. These glands occasionally become the seat of abscess formation and subsequent rupture may

cause urethro-vestibular or urethro-vaginal fistulae. There are other smaller glandular follicles along the urethra, as in the male, and the involvement of these also favors chronicity in gonorrheal inflammation to a greater extent than in any other. Examination of the urine will reveal clap shreds. The urethral orifice will appear somewhat reddened and oedematous. Pus can perhaps be milked from the urethra and Skene's glands and the reddened orifices of the ducts of these glands may be seen in the lower urethral wall.

Acute gonorrheal vulvitis is associated with a profuse, puralent, irritating and extremely foul discharge which excoriates the surrounding skin. Itching and burning about the vulva are complained of and there is pain while walking. There is redness and oedema of the vulva and there are erosions on the labia majora and minora.

Chronic gonorrheal vulvitis is seen as a chronic inflammation of Bartholin's glands. This may occasion no symptoms unless lighted up by excesses into an acute exacerbation. The condition is associated with hyperaemic or eroded spots at the openings of the ducts of the glands. These have long been known as "maculae gonorrheicae." The thickened and tender glands can be felt on either side of the vulva and pus may be squeezed from the orifices of their ducts.

Acute Bartholinitis causes an extremely painful, red and tender swelling of the labium majus often as large as a pigeon's egg. This swelling may extend to the lesser labium and upwards as far as the clitoris. Fluctuation may later appear and there are then rigors, fever and sweats. The pus may rupture on the inner side of the labium or burrow backward along the perineum, forming extensive sinuses.

Bartholinitis is extremely important in gonorrhea for the reason that inflammation of this gland is very rarely seen in any other affection.

Acute vaginitis, except in very young individuals, is not so commonly seen in gonorrhea as was at one time supposed to be the case. The vagina is more resistant to the gonococci than the other structures. Acute gonorrheal inflammation of the vagina is characterized by a hot, burning discharge with a sense of weight aggravated by motion. There may be slight fever and general malaise. The vaginal mucous membrane appears reddened, oedematous, partially eroded and granular in patches. There is much tenderness.

Chronic gonorrheal vaginitis is rarely seen. It is associated with a purlent discharge and hyperaemic, granular patches scattered over the mucous membrane. It is usually kept active by an infectious discharge from the cervix.

Acute and chronic gonorrheal cervicitis cause no painful sensations. The cervix becomes considerably enlarged, the mucosa is everted and the glands become hypertrophied and excessively active pouring out a mucoid, white of egg like, stringy secretion, the "weeping cervix." This secretion may accumulate in considerable quantity with the patient on her back and it is then discharged en masse when she stands.

Acute gonorrheal endometritis is characterized by chills and fever, pain in the pelvis and back and a muco-puralent discharge from the cervix. The uterus is enlarged and tender; the cervix swollen, oedmatous and its mucous membrane everted.

Chronic gonorrheal endometritis is associated with a muco-purulent discharge from the cervix, painful and irregular menstruation, a bearing down sensation in the pelvis, backache and intercurrent acute attacks. The uterus is enlarged and tender.

Acute and chronic gonorrheal salpingitis and oophoritis are not associated with any pathognomonic symptoms. Menstrual irregularities occur and there are attacks of very painful pelvic peritonitis. The patient undergoes a rapid loss of health. The tubes may be found filled with pus. This may rupture into the pelvis or discharge into the uterus, or both ends of the tube may become blocked and the pus becoming sterile and clear, there may result a hydro-salpinx.

The inflammation of the ovaries may finally result in atrophy and cyst formation.

Acute gonorrheal perimetritis results from extension of teh disease from the tubes and is more prone to develop during pregnancy or after childbirth. The symptoms are those of acute pelvic peritonitis; pain, tenderness, vomiting, fever, and an attack may end fatally in a few days or go on to resolution with the formation of adhesions, or a pelvic abscess may result. An apparently large exudate, however, may subside entirely.

Chronic or recurring gonorrheal perimetritis is perpetuated by infection of the tubes. The patient complains of pain and tenderness in the pelvis, backache, leucorrhea and dysmenorrhea. Jars and strains are painful and there is dyspareunia. There are recurrent acute attacks..

Endometritis, inflammation of the tubes, ovaries and pelvic peritoneum are usually spoken of together as pelvic inflammatory disease, either acute or chronic. The findings on pelvic examination are tenderness, adhesions of varying density and purulent and cystic degeneration of the various structures.

This is indeed an unwholesome picture we have sketched, a veritable Pandora's box of ills. In considering the diagnosis a careful history should first be obtained and then a careful local examination made keeping in mind the points enumerated. As stated earlier in this paper, the diagnosis of gonorrhea was not upon a firm scientific basis until the discovery of the gonococcus by Neisser in 1879. The microscope is, therefore, the crux of the situation. Every case should be subjected to careful bacteriological examination in addition to digital and specular examination. In the event

of a microscopical examination it is not alone sufficient to stain your smear with some aniline dye and upon the discovery of a diplococcus to pronounce the case one of gonorrhea. One can be practically certain of the diagnosis after extensive experience in observing the grouping, morphology and frequent intra-cellular arrangement of the gonococci without proceeding further, but for scientific accuracy it is necessary in all cases to determine whether or not the diplococci which you find will decolorize with the Gram Stain. The gonococcus decolorizes always upon the application of this stain. The employment of this stain will differentiate the organism from all others except the micrococcus catarrhalis, the diplococcus intracellularis meningitidis of Weichselbaum and certain chromogenic cocci. The micrococcus catarrhalis is the only one of these which has been identified in the genito-urinary tract but the symptoms referable to this organism are not similar to those of gonorrhea. It is therefore sufficient for the diagnosis in a case clinically gonorrhea to demonstrate in the discharges a Gram negative diplococcus.

Occasionally there will be seen a case which we suspect is gonorrheic but it seems impossible, however, to demonstrate the gonococcus in either discharges or scrapings. Matters of diagnostic import in these cases are a history of uterine catarrh without obvious cause; disease of Bartholin's glands and especially the "maculae gonorrheicae;" the discharge of muco-purulent matter from the cervix without erosions or pseudo-erosions of the os; disease of the adnexa or the pelvic peritoneum.

In these cases also the bacterial vaccines may render us service. The subcutaneous injection of from fifty to one hundred million killed gonococci in a case of chronic gonorrhea will in practically all cases produce a reaction evidenced by general malaise and usually temporary increase in the discharge. The reaction is specific and the injection apparently does no harm. Hirschberg, of Baltimore, claims to have discovered a specific skin reaction for the various organisms which may infect the individual by the use of their corresponding vaccines. The reaction he describes is analogous to the v. Pirquet Tuberculin test reaction and consists in redness and slight swelling about the point of inoculation of the vaccine. I have seen no confirmation of his work but if it is true it may perhaps be an aid to us in these borderline cases of gonorrhea to settle the question by inoculation of gonococcus vaccine and observing the presence or absence of a reaction. Like all other tests of a similar nature it is to be feared, however, that the personal equation would give us rather variable results.

The latent cases of Noeggerath still remain to be considered and, if we admit his contention of the existence of symptomless signless gonorrhea in women, we will also have to admit the practical impossibility of diagnosing these cases. We are apt to come in contact with them perhaps among our cases of one-child sterility without complaint or obvious cause and in puerperal infections due to the gonococcus. During the active period of the infection in the latter class the gonococcus is of course demonstrable in the lochia and its presence clears up all doubt.

In conclusion it may be said that gonorrhea does not kill so frequently as it maims. The percentage of mortality directly attributable to it is very small indeed, but there is no disease which entails so much suffering, so much misery as this one propagated and fostered by this little cloven-hoofed gonococcus. It therefore devolves upon us as physicians, and that it as conservators of human well being according to the enlarged precepts of the ancient Hippocratic oath, to endeavor to recognize this Protean infection when we see it. We often find it where we least expect to and it would be well for us to be constantly on our guard lest we allow preconceived ideas to deter us from looking for the gonococcus in cases towards which it seems to us perhaps like heresy to direct the breath of suspicion. Look and you will be surprised. Social Morality is all very well and I am much in favor of it, but we can preach social morality until doomsday and we will still have gonorrhea with us. It will be well for us to combine a little teaching with our preaching: to teach womankind the meaning oftentimes of slight unusual symptoms referable to the genital tract and the necessity of seeking advice therefor; to teach the profession at large that a little smoke in this field is often indicative of the starting point of a grave conflagration. We must get these cases early in order that we may do more with them. We must reduce the percentage of total blindness from ophthalmia neonatorum; we must lessen the number of women coming to operation for gonorrheal pelvic inflammatory disease; we must decrease the number of childless homes. To do this means early diagnosis of genital gonorrhea and prompt radical treatment. To this end a careful consideration of the points in diagnosis brought out in this paper and a conscientious application of these to our cases will, I believe, be time well spent.

Rheumatism.

Further discussion of an old subject by John N. Upshur, M. D., Richmond. Va.

I suppose no subject better illustrates the old saw, "many men of many minds," than the one I have undertaken to discuss. This is not only the case from one standpoint, as causation, or treatment, but literally em-

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Presented to the Tri-State Medical Association of the Carolinas and Virginia, at the meeting held at Raleigh, N. C., February 22d and 23d, 1911.

braces every side of the subject. Forty years ago there was wide diversity of opinion as to treatment, and with the prevailing opinions of the time as to the causation of the disease, a torpid condition of the emunctories as the predisposing cause, and cold and exposure as the exciting cause, the therapy of the disease was based upon this view of the malady, and there were many remedies given in a perfectly empirical way, the remedy having the most reputation being "six weeks." I am familiar with the discussion whether or not Rheumatism is due to a specific germ, and must confess that I have not arrived at a definite conclusion in the matter. The tonsils are claimed to be the avenue of entrance for the infective germ into the system, and consequently a bloody crusade has been made in extirpating them as a preventive means against the malady. Undoubtedly the germ theory of the causation of the disease, whether it can be sustained or not, has been much colored by the progressive and advanced views, some of them proven, of the germ causation of disease, and the search after truth naturally turns to this explanation, as the solution of a difficult problem. Conspicuous among the symptoms of Rheumatism is the excessive acidity of the urine and sweat, this is due to the excessive amount of lactic acid in the blood and general system, or is supposed to be, as by some, this excess is charged with being the causative factor of the disease. This is similar to the reasoning which makes uric acid in the blood and general system the cause of gout. I do not believe that this is true in either case. The excess of lactic acid in Rheumatism as of uric acid in gout, but back of the condition of acidity, a complex cause of destruction of balance in the process of metabolism and the varied physiological processes which enter into it, the excess of acid in either case being the result of this condition and not the cause. So far as Gout is concerned, the onus of causation back of metabolism is placed on errors in diet, and I would add should be put on excessive nervous strain. In Rheumatism, how much errors in diet, nervous strain, or exposure may be causative we are unable to say, nor do I believe that any one has satisfactorily demonstrated that the entrance of a specific germ into the system is responsible for the excess of lactic acid, so conspicuous in the sweat and urine of cases of acute Rheumatism, eliminated through these channels from the system. Furthermore, in this discussion of Rheumatism, it must not be confined simply to the lesions found in the joints, characterized by pain, heat and swelling with discoloration, but must be extended to that condition found in the muscular system as well, involving groups of muscles, or the general muscular system, rendering the patient, as I have seen, totally unable even to turn over in bed without assistance, and defying all remedies for weeks. Of course Rhematic Arthritis and the damaged condition of the articulations seen in that affection are not under consideration, that is a different affection. If it be true that Rheumatism is due to a specific germ through the tonsils, the present crusade in the removal of the tonsils and adenoids in the young subject, should render the next generation immune to Rheumatism, and the malady should only be a remembrance of the past, does any intelligent man believe that this will be the case? Coming generations will still have to contend with the factors of disordered metabolism and exposure. I quote in substance from Loeb of Chicago, (Archives of Internal Medicine October 15th, 1908), "The advocates of the germ theory of Rheumatism point to the investigations of Achalme and his followers, notably Thirolaix, Thiboulat and Apert, Westfhal, Wasserman and Malikoff, and the large school in Germany and England, especially Poyton and Payne. Achalme described a baccillus similar to the baccillus of anthrax, isolated from a case of acute Rheumatism, dying on the fourth day. Later, he reported a second autopsy, with similar findings, and also found the same in six living patients. Thirolaix found the anaerobic baccillus in nine cases of Rheumatism, and other French and Italian observers a few times. Lesions were produced by these observers in guinea pigs and rabbits, resembling rheumatism, endocraditis, pericarditis and pleurisy. During the last ten years, an enormous amount of time has been given to the study of the bacteriology of Rheumatism, and not more than eight or ten observers have found the organism. The manifestations in animals have not resembled those of Rheumatism in the human being. Achalme believes the germ responsible for some but not all cases of Rheumatism. Poyton and Payne and others have become convinced of the specificity of the germ, but unfortunately, many of their cultures have been derived from the cadaver. Flexner's observations have shown that various organisms proliferate in the human body, and are found in the blood before death. Philip failed to grow the organism in twenty-one cases in which blood cultures were attempted, and in six inoculations from the knee joint. "Meyer was unsuccessful in thirty cases." He concluded that the disease was an intoxication from bacteria which remained localized in the throat, or if the organisms entered the blood they were rapidly destroyed there. Meyer was compelled to assume that joint involvement in scarlet fever, typhoid fever, and other diseases transient in nature were produced by a mixed infection. Walker in a late paper admits that the case in favor of Micrococcus Rheumatism is not proven. The experiments of Widal, Benzoncon, Griffin and Coles have rendered it doubtful, whether other organisms may not act as causative factors in the disease. Coles' observations for years of blood cultures at the Johns Hopkins Hospital showed them to be in-

variably sterile. In conclusion, Loeb after elaborate investigation says, "it is difficult to draw any possitive conclusions from my work until the coccus is proven to occur in most of the living patients as well as the fatal cases of Rheumatism, the claims for its specificity will remain an unstable foundation." Osler says, "its bacteriology is still under discussion, that there is considerable evidence against the view of its being a mild pyogenic infection. the morbid anatomy shows no characteristics of disease." Kelley says, "the cause has not been isolated." Schloss says, "diagnosis can be based only on the clinical features of the disease." In the face of the above facts from observers whose competency none will question, the fact must be admitted that the whole question of the bacterial origin and infection of Rheumatism is open to grave doubt and needs much more accurate observation and investigation. The men educated since bacteriology was introduced and developed, necessarily gives to them a bias in favor of the germ theory of causation of all diseases, to older men than these scepticism is natural, but the honest observer will occupy a middle ground, and is in the position to arrive at just and accurate conclusions. Therefore let us be earnest and honest seekers after the truth for the development of a rational and efficient therapy to relieve a suffering humanity. Bearing in mind the foregoing statements, the treatment of Rheumatism must of necessity be more or less empirical. The introduction of the salicylate group has undoubtedly furnished us a valuable remedy. But the method of exhibition of this efficient remedy has been more or less empirical, and I believe it is not free from danger and in the hands of some fails because of excessive dosage, or its administration before a proper basis has been laid. It should be preceded by such agents as will put the varied conditions of metabolism in a normal or nearly normal physiological condition as possible. The gravest condition connected with Rheumatism is cardiac involvment. We should never in any case loose sight of this danger, endocarditis being the most common complication. Conspicuous symptoms of acute Rheumatism are the intensely acid urine and sweat, indicative of the excess of acidity in the system. Clinicians speak of the administration of alkies, and warn against excessive doses because of their deliterious action on the heart. My examination of authorities, however, does not lead me to believe that these alkalies have been given in the best way; usually they have been exhibited with some form of the salicylates. Long experience has convinced me that an active mercurial purge should be the initial dose of medicine, to be followed by gr. x of Bi-carb. potash every two hours until the sweat and urine are neutral, then the administration of the salicylates gives excellent results. The patient should be encouraged to take copious draughts of water. At a meeting of the AMERICAN MEDICAL ASSOCIATION at Atlantic City, in a discussion of this subject, I was impressed by the almost universal omission of all alkaline treatment, and the enormous doses of the salicylates given, one speaker saying that he had given as much as 300 grs. of salicylic acid or salicyate of soda in twenty-four hours, special reference was made by these speakers to the head symptoms produced by the salicylates. Many observers claim that the salicylates protect the heart. I am satisfied that this is an error, on the contrary, I believe that it is more than probable that heart complications are much more liable to occur, if the salicylate preparations are exhibited before the blood is rendered neutral by the administration of an alkali. In this connection and pertinent to this discussion, let me call attention to the physiologic action of sale cylic acid, the basis of the group. Large doses produce headache, visual disturbance, even to temporary blindness, sometimes extreme dyspnoea, **tumultuous heart action, feeble in its beat.** Toxic doses produce nephritis, albumin and even blood may pass off in the urine. Salicylic acid is an irritant to mucous membrane; it also has a cumulative action. It gives comfort in the pain of Rheumatism through its analgestic property expended on the end nerves. With the fact of its irritation of mucous membranes, the blood already acid, circulating through the heart loaded with salicylates, it does not require any stretch of imagination to understand how it may increase the risk of endocarditis by contact with the heart lining, more logically explaining it than upon the basis of bacterial infection by a germ not yet known or proven to the satisfaction of the profession, or even of the investigators themselves. One can understand how the heart is protected when the agent enters a neutral blood, the kidney already responding to increased elimination from the stimulus of a potash salt. It has not been my purpose to go into a discussion of the elaborate treatment of Rheumatism, what has been said is in the line of suggestion for careful thought. But in conclusion a word as to the therapy of endocarditis. There is an increased viscosity and plasticity of the blood, predisposing to emboli forming in the heart as the blood whips over the muscular columns and tendons, these emboli being always a source of acute danger. I wish to emphasize the value of carbonate of ammonia in doses of gr. v to x not only as an alkali and diffusible stimulant, but because of its property without depletion to promote an aplastic and fluid condition of the blood, thus minimizing the danger of the formation of emboli in the heart, diminishing inflammation and consequent risk of thickening and stiffening of the cardiac valves. In a word, that a patient under its influence is more apt to recover from an attack without a crippled heart. Nor is this all, it neutralizes effete material in the

blood and stimulates the kidneys to an increased elimination of the waste products of metabolism. Of course what has been said is based on a careful and accurate diagnosis of acute Rheumatism from the clinical manifestations, both systemic and localized in the joints, remembering that the muscles may suffer from the same general causation, and that myalgias of all kinds will respond to the identical treatment indicated in articular rheumatism. It is also true that the best men sometimes fail to distinguish between rheumatism and the initial symptoms of rheumatic arthritis, benefit coming from treatment in the first case and only partial relief or no relief at all in the latter. Up to this time treatment as outlined, based on the old ideas of causation, have given better results, than that founded upon the bacterial explanation of it as an infective disease. As progressive men it is most fitting that we should test all theories and hold fast to that which is good.

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The Treatment of Yaws with "606."

Strong (Philippine Journal of Science) records the histories of 25 cases of yaws treated by Ehrlich's dioxydiamidoarsenobenzol. The Dr. says that the drug forms an ideal specific for these diseases. Three or four days after its injection the granulomatoas lesions begin to fade and in the course of from ten to twenty days they usually have disappeared entirely. Tumour masses measuring several centimetres in diameter and about a centimetre in thickness are absorbed in a short space of time, and under the influence of no local treatment whatever. The disappearance of such lesions and the cures produced are, to the writer's mind, nothing short of marvellous. Even where large gramulomatous masses or deep ulcerations existed, these were healed within two to four weeks. A slight reddening appears about the margins of the lesions 24 to 48 hours after the injection of the preparation. The centre of the lesion then usually assumes a purplish or bluish congested appearance. Where crusts exist these frequently are not absorbed, but drop off. None of the cases treated have shown any sians of relapse, although they received but a single injection; over four months have elapsed since most of them were inoculated. In severe instances of the disease and where the ulcerations are extensive and of long standing the Doctor believes that a second inoculation given about three weeks after the firft one may be advisable. The Dr. concludes from his observations that dioxydiamidoarsenobenzol is as important a specific for yaws as quinine is fo. malaria.

Indications for Artificial Termination of Pregnancy.

One of the most important indications for interrupting pregnancy is hyperemeris gravidarum. A certain degree of vomiting during dregnancy is physiological and requires no treatment, On the whole, occasion for interference will not be frequent, thus, Hammerschlag could cure 17 out of 19 cases by means of diet, drugs and rest. Among heart diseases, mitral stenosis and myocarditis are often serious complications of pregnancy and may demand interference when decompensation cannot be rapidly corrected. It is often advisable later to remove the ovaries so as to prevent subsequent pregnancy is exactly the same as under ordinary conditions Tuberculosis develops rarely during pregnancy; in the majority of cases, a latent process becomes evident. Tuberculosis is an extremely grave disease for the pregnent woman, for not only does the disease rapidly progress but the respiratory and muscular exertions accomyanying the labor pains are apt to force infected matter into healthy portions of the lung and the general increase of blood-pressure will favor pulmonary hemorrhage. Involvement of the larynx it particularly dangerous. In a small percentage of cases where the best care is possible, the patient may be tided over the dangerous period. but she must be constantly under the control of a phpsician. Interruption of pregnancy is not indicated in the third stage of the disease as uo improvement is to be expected, nor is it so often in place during the second half of pregnancy in any case of tuberculosis, since here the artificial termination is frequently as dangerous to the patient as the natural termination. A nephritis of pregnancy frequently causes no trouble and disappears after gestation is ended, provided all toxic influences are carefully avoided and the patient keeps to a strict diet. If uremic symptoms appear, energetic treatment may be tried, but should eye symptoms supervene, no more time should be wasted. A transition of this type into chronic nephritis is exceptional. If the patient already suffers from chronic disturbances of renal secretion, severe symptoms are apt to develop early during gestation and the womb must be emptied early. An acute nephritis appearing during pregnancy may run the same course as under ordinary conditions. Pyelitis is usually amenable to treatment and only rarely requires interference. A pregnant woman with diabetes must be carefully watched, and if the sugar increases and acetnoe appears despite the dietng, pregnancy should be terminated. In some cases the disease

remains stationary, so that the presence of sugar alone does not necessarily signify much. Chorea of pregnancy may be of two tydes: in one the onset is slow and the cure usually rapid with isolation, diet and the administration of diuretics, diaphoretics and nerve-tonics. In the other, much more severe type, the onset is acute and rapid interference may be the only cure.—Berl. klin. Woch.

The Presence of Acid Fast Bacilli in the Faeces in Tuberculous Conditions.

Wilson (Liverpool Medico-Chururgical Journal) says that it is well established that drugs, toxins and waste products of metabolism are secreted by the intestines, and recent research tends to prove that the body rids itself also of micro-organisms in this way. Among the organisms studied in this respect, the tubercle bacillus has attracted some attention. Recent work has shown that besides being one of the paths of infection in tuberculosis, the intestines may also excrete the tubercle bacillus, although the focus of disease is at some remote part of the part, such as in a lymph gland or a joint. In these the blood must act as a carrier, and it is interesting to note that the tubercle bacillus has been found in the blood of phthisical patients, although some doubt has recently been expressed as to its alleged frequency. In 1906 Emerson showed that acid-fast bacilli occurred in the stools in pulmonary and abdominal tuberculosis, although post-mortem examination showed no iutestinal ulceration. In 1908 Rosenberger recorded 57 cases in which acid-fast bacilli had been found in the fæces, in which various tobereular lesions were found full matured. Ohe of these was a case of lupus vulgaris. Fabricci pointed out the value of this test in children, in whom no expectoration can be obtained. Out of 35 children suffering from various forms of tuberculosis the result was positive in 11. Moore Alexander found acid-fast bacilli in 52 out of 74 cases of tubercular disease in various parts of the body. He was unable to find them in the fæces of 17 healthy persons, and of 111 patients suffering from diseases other than tuberculosis. The Dr. describes the results of his own investigation in the nine cases of lupus vulgaris. Thin smears of a perfectly fresh stool were made with a sterile glass rod on half-a-dozen glass slides, dried in air, and gxed in Bunsen flame and stained by the Zeihl Nielsen method. In addition, in the first six cases, an extract of the fæces was injected into guinea-pigs, but in each case the infection proved negative, and the smears also did not show any acid-fast bacilli. In none of these cases were the stools hard. Alexander has shown that the tubercle bacillus is often absent in this condition, but may appear after the administration of a purgative. The negative results in lupus vulgaris are interesting in view of the fact that it has always been regarded as a strictly local affection, with little tendency to give rise to tuberculosis in other organs. The Dr. says in conclusion that although so far the results have been negative, the success which has attended the examination of the siools in tubercular disease of the glands and joints leads one to hope that by further investigation and improvement in technique it may be possible to demonstrate the tubercle bacillus in the fæces of patient suffering from so-called toxi-tuberculides. In such cases repeated examinations might be rewarded with success, and the tubercular origin of these lesions confirmed.

Caesarean Section in the United Kingdom.

The whole of the January number of the British Journal of Obstetrics is devoted to a most valuable monograph by Dr. Amand Routh on Cæsarean section in this country, based upon the reports of 1,282 cases reported to him by the actual operators. The cases are always consecutive; that is, any operator's list is rejected unless it contains particulars of all his cases; unfortunately, several of the pioneers of this operation are now deceased, so that the table is necessarily imcomplete. The cases are analysed thoroughly from every standpoint; it is only possible here to select a very few interesting items from the paper. The maternal mortality before 1891 was 35.7 per cent.; thence to 1895, 27.7 per cent.; to the end of the century, 15.3 per cent.; from 1901 to 1905 it was 13.5 per cent.; and in the past five years in over seven hundred cases it has been only 8.1 per cent. The indications held by the various obstetricians to justify Cæsarean section are very numerous and diverse. It is noteworth that contracted pelvis was the indication in 1,058 out of 1,282 cases; fibroids account for 72 more, cancer of the cervix for 31, ovarian tumors for 28. Stenosis of the cervix led to Cæsarean section 7 times; placenta prævia 7 times; eclampsia 10 times; cancer of the rectum 8 times; pelvic tumours, such as osteomata and sarcomate, 15 times. Other indications occurred less often. For contracted pelvis the figures show plainly how important it is to operate either before labour or with the membranes unruptured. In such cases mortality (since 1891) is but 2.9 per cent.; whereas in the less favourable circumstances of ruptured membranes, frequently examinations, and attempts at delivery, the percentage of maternal deaths is 17.3.—The Hospital Journal, London.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

THE JOINT COMMITTEE ON PUBLIC POLICY AND LEGISLATION MAKES IN PART ITS FOLLOWING REPORT THROUGH ITS SEC. L. B. McBRAYER, M. D. ASHEVILLE, N. C.

I beg to report the result of our labors with the legislature in regards to public health and medical legislation. The Health Bill 606 went through practically as it was written. This covered several important amendments to the health laws of the state and the appropriation of $25,000. Among other items in making up the $25,000 was one of $3000 for free diphtheria antitoxin. This was cut out by the appropriation committee, so thar the bill as it passed carried an appropriation forthe State Board of Health for $22,000. Dr. McBrayer states that while the appropriation committee cut out the $3000 for free antitoxin they passed an appropriation of $2000 for the treatment of hog cholera, and this appropriation passed both the House and the Senate and became a law.

The educational qualification bill 618 was kept on the House calendar for more than a month, and when it came up in the House on Saturday morning before the adjournment of the legislature there was practically no opposition to the bill. Every representative in the House that aspired to leadership, or even to special notice, supported bill. When the vote was taken there were only twelve or fifteen votes against it. The bill was lost three different times from the time it passed the House Saturday morning until it was considered in the Senate Tuesday afternoon. The last time it was never found, and Senator Martin of Buncombe introduced a copy of the bill. At that time some fifteen ar more members of the Senate were out, all but one of whom, Senator Lemond, would have voted for the bill. With this status of affairs the bill failed of passage by four votes.

Senator Kitchen was the leader of the opposition, although his brother the Governor recommended the passage of the bill in his message to the legislature. Senators Bassett, Bennett and Long joined with Kitchen very vehemently in opposing the bill.

Senator Robert N. Cartwright, M. D., chairman of the Senate committe on health was absent at the bedside of his sick wife. Senators Martin of Bumcombe, Boyden, Hobgood, Sikes, Hicks and others supported the bill warmly. Drs. Kent and McPhaul in the House together with other physicians, gave valuable assistance.

Another important measure that became a law was the establishment of a training school for feoble minded. The passage of this bill was due largely to the efforts of Dr. I. M. Hardy, of Washington, N. C., who spent more than a month in Raleigh during the session advocating this measure. Speaker Dowd came down out of his chair and fought this bill on the floor. However, on a roll call vote there were only fifteen votes against the bill, Dr. Hardy deserves great credit for his splendid work in the matter.

Dr. Kent, a member of the House, succeeded in passing s bill allowing the shipment of dead bodies from other states into this state for the purpose of anatomical work. This will be a great help to the medical schools of our state for they have been having great difficulty in securing sufficient anatomical material.

THE AMERICAN MEDICO-POLITICAL REFORM LEAGUE.

The exigencies of and the urgent necessity for a reform movement in the American Medical Association and its constituent societies demand an organization for the purpose of systematically conducting a crusade against the existing political evils in these bodies. The American Medico-Political Reform League, operating under a charter from the State of Illinois, has been organized to meet the demand, and has been incorporated for the purpose of conserving the principles of democracy, fair play, free speech, equal rights and membership in government in the medical societies of the United States by attaining the following specific objects:

1. Adoption of the general ballot and referendum in the American Medical Association and its constituent bodies,

2. Provision for the automatic acquirement of membership in the A. M. A. by members of the district societies, thus abolishing non-membership A. M. A. voting in said dtstrict societies, or,

3. Legal elections which shall abolish the voting of non-members of the A. M. A. for delegates to State Societies;

4. Membership transfer cards for members of the A. M. A. who may change their locations;

5. Amendment to the By-laws of the A. M. A. so as to prevent multiple officeholding, thus provining for the seperation of the offices of Secretary, Editor and General Manager;

6. Election of delegates to the State So-

cieties and the A. M. A. by general ballot in the district societies, the representation being proportioned to the numerical strength of the district societies;

7. Election of Councillors to the State Societies by general ballot of councilor districts;

8. Abolition of voting power in the Houses of Delegates of Councillors of State Societies, thus following the precedent set by the A. M. A. in the case of its Trustees;

9. An open forum for discussion of medical society policies and methods in the State and National Journals;

10. Non-partisan administration of State and National Journals;

11. Encouragement of all logical and practical measures against abuses of Medical Charities;

12. Encouragement of all logical and practical measures to elevate the standard of Medical Education.

The following officers have been elected: President, Dr. James E. Stubbs; Vice-President, Dr. Oliver Dydings; Secretary, Dr. Lewis W. Bremerman; and Treasurer, Dr. A. Ralph Schnstone.

Any members of the regular medical profession having an interest in the above broad, liberal and very correct principles are respectfully requested to communicate by letter or postal card with the Secretary, Dr. Lewis W. Bremerman, 72 Madison St., Chicago Ill.

The following motto of the League should in itself commend the organization to all who have seen quite enough of, and have been disgusted with the misrule and mismanagement that has been for the past ten years dominating the National Association:

"Politics to serve principles only.
"Office as a means to serve principles only.
"Equal rights, no special privileges, no monopoly."

—The Southern Practitioner.

TENNESSEE STATE MEDICAL ASSOCIATION.

The seventy-eighth annual meeting of the Tennessee State Medical Association was held in the Assembly Room of the Hermitage Hotel, Nashville, on Tuesday, Wednesday and Thursday, April 11th, 12th and 13th inst. The following unusually large and attractive program, was carried out.

The address of the President, Dr. John A. Witherspoon, was delivered in the evening session of Wednesday.

PROGRAM.

1. "Intestinal Indigestion. What Is It? What Causes It? What are Its Diagnostic Signs and Symptoms? How should It be Treated?" Chas. P. McNabb, M. D., Knoxville.

To open discussion, O. H. Wilson, M. D., Nashville.

2. "Some Remarks upon Cancer, with Especial Reference to Cancer of the Breast." Holland M. Tigert, M. D., Nashville.

To open discussion, L. E. Burch, M. D., Nashville.

3. "The Treatment of Peritonitis." Richard A Barr, M. D., Nashville.

To open discussion, M. S. Miller, M. D., Knoxville.

4. "Radium," G. P. Edwards, M. D., Nashville.

To open discussion, Dr. Geo. H. Price, M. D., Nashville.

5. "Light: The Right and the Wrong Kind." H. E. Geotz, M. D., Knoxville.

To open discussion, G. C. Savage, M. D., Nashville.

6. "Pneumothorax." Joe Clifton, M. D., Hickory Valley.

To open discussion, K. S. Howlett, M. D. Franklin.

7. "Eye-Strain; the Results of Accurate Refractive Work." Thos. F. Staley, M. D., Bristol.

To open discussion, H. B. Kincaid, M. D., Memphis.

8. "Spina Bifida, Based on Seven Operations." B. B. Cates, M. D., Knoxville.

To open discussion, Jere L. Crook, M. D., Jackson.

9. "Fracture of the Tibia." Paul F. Eve, M. D. Nashville.

To open discussion, Coopet Holtzclaw, M. D., Chattanooga.

10. "C. C. C." C. C. Mason, M. D., Maryville.

To open discussion, Kahle Donoho, M. D., Knoxville.

11. "Diet in Typhoid." K. P. Elam, M. D., Idol.

To open discussion, O. R. Tomlinson, M. D., Tate Springs.

12. "Periodic Alcoholism, the Influence of Intestinal Toxemia in Bringing on a Spree." Geo. E. Petty, M. D., Memphis.

To open discussion, Chas. P. McNabb, M. D., Knoxville.

13. "Significance and Surgical Treatment of Uterine Displacement." R. M. McCown, M. D., Knoxville.

To open discussions, J. A. Gaines, M. D., Nashville.

14. "Pellagra, with Report of Case." Enoch H. Jones, M. D., Murfreesboro.

To open discussion, J. M. King, M. D., Nashville.

15. "The Relationship of Food to Dis

ease." E. A. Timmons, M. D., Columbia.

To open discussion, R. W. Billington, M. D., Nashville.

16. "Opthalmia Neonatorum from the Standpoint of an Obstetrician." Elizabeth C. Kane, M. D., Memphis.

To open discussion, M. C. McGannon, M. D., Nashville.

17. "The Traumatic Neuroses Resulting from Alleged or Actual Injury as Viewed by the Medico-Legal Expert." Raymond Wallace, M. D., Chattanooga.

To open discussio , Duncan Eve, M. D., Nashville.

18. "Chronic Affections of the Hip." W. C. Campbell, M. D., Memphis.

To open discussion, S. R. Miller, M. D., Knoxville.

19. Too Much Medicine for the Good of the People." John P. Blankenship, M. D., Maryville.

To open discussion, J. T. Hardison, M. D. Lewisburg.

20. "The Diagnosis of Tumors of Bones." R. J. McFall, M. D., Cumberland City.

To open discussion, M. L. Hughes, M. D., Clarkville.

21. "Fibroid Tumors of Uterus or Appendicitis." J. Hugh Carter, M. D., Memphis.

To open discussion, W. D. Haggard, M. D. Nashville.

22. "Diagnosis and Treatment of Acute Inflammatory Glaucoma." Walter Dotson, M. D., Gallatin.

To open discussion, T. H. Wood, M. D., Nashville.

23. "Report of Cases." Duncan Eve, M. D., Nashville.

To open discussion, Cooper Holtzclaw, M. D., Chattanooga.

24. "Two Outbreaks of Typhoid Fever in an Institution Traced to Bacilli Carriers." Thos. Weaver, M. D., Nashville.

To open discussion, Wm. Ditterer, M. D., Nashville.

25. "Dysentery: Children." Wm. A. Reed, M. D. Livingston.

To open discussion, J. T. Moore, M. D. Algood.

26. "Traumatic Perforation of Abdominal Viscera." W. M. McCabe, M. D., Nashville.

To open discussion, R. E. Fort, M. D. Nashville.

27. "The Present Status of X-Ray in General Diagnosis and Treatment." Hazle Padgett, M. D., Nashville.

To open discussion, W. S. Lawrence, M. D., Memphis.

28. "Sarcoma of Stomach, with Report of Case and Exhibition of Patient." John Overton, M. D., Nashville.

To apen discussion, Richard Barr, M. D., Nashville.

29. "The Practice of Medicine as a Business, or Pulling Up Stream." J. S. Rawlins, M. D., Dancyville.

To open discussion, H. Berlin, M. D., Chattanooga.

30. "Practical Laboratory Work for the General Practitioner." Newton Evans, M. D., Nashville.

To open discussion, W. S. Farmer, M. D., Cookeville.

31. "The Significance of the Tongue in Diagnosis." H. E. Christenberg, M. D., Knoxville.

To open discussion, Chas. P. McNabb, M. D., Knoxville.

32. "Sero-Fibrinous Pleurisy, and Report of Cases." J. T. Moore, M. D., Algood.

To open discussion, W. J. Breeding, M. D., Ravenscroft.

33. "Lobar Pneumonia and Its Treatment in its Various Stages." I. R. Osteen, M. D., Ashport.

To open discussion, Frank A. Jones, M. D., Memphis.

34. "Infectious Poly Myositis." S. M. Yancey, M. D., Dayton.

To open discussion, J. R. Gillespie, M. D., Dayton.

35. "Tho Use of Normal Salt Solution." C. N. Cowden, M. D., Nashville.

To open discusfion, Jere L. Crook, M. D., Jackson.

36. "The Treaiment of Cancer of the Skin and Mucous Membranes." J. M. King, M. D., Nashville.

To open discussion, L. L. Sheddan, M. D., Knoxville.

37. "The Disease and the Man." Wm. B, St. John, M. D., Bristol.

To open discussion, Frank J. Runyon, M. D., Clarksville.

38. "Ear Ache." J. F. Hill, M. D., Memphis.

To open discussion, G. C. Savage, M. D., Nashville.

39. "Adenoids and Their Complications." J. H. Chism, M. D., Carthage.

To open discussion, C. D. Robins, M. D. Gordonsville.

40. "The Duty of the Country Physician to the Mother and Child." H. C. Curtis, M. D., Algood.

To open discussion, Sam Bloomstein, M. D. Nashville.

41. "Salvarsan (606) and the Wasserman Reaction in Sixty Cases of Syphilis." Wm. Litterer, M. D.' Nashville.

To open discussion, J. W' Handley, M. D., Nashville.

42. "Surgical Treatment of Posterior

Displacements of the Uterus." W. S. Anderson, M. D., Memphis.

To open discussion, L. W. Haskell, Jr., M. D., Memphis.

43. "Submucous Resection of the Nasal Septum." E. C. Ellett, M, D., Memphis.

To open discussion, J. McC. Hogshead, M. D., Chattanooga.

44. "When Does the Gonorrheic Cease to Be Infectious?" C. F. Anderson, M. D. Nashville.

To open discussion, E. M. Sanders, M. D., Nashville.

45, "Infection of the Female Generative Tract Following Labor at Term, Abortion or Miscarriage." E. Dunbar Newell, M. D., Chattanooga.

To open discussion, J. T. Altman, M. D., Nashville.

46. "Treatment of Syphilis with '606.'" W. Frank Glenn, M. D., Nashville.

To open discussion, J. W. Handley, M. D., Nashville.

47. "How to Succeed in the Practice of Medicine." T. M. Roberts, M. D., Sweetwater.

To open discussion, S. R. Miller, M. D., Knoxville.

48. "Injuries of the Head." Duncan Eve, Jr., M. D., Nashville,

To open discussion, Jere L. Crook, M. D., Jackson.

49. "Hernia of the Diaphragm. With Report of Two Cases." C. Holtzclaw, M. D.. Chattanooga.

To open discussion, W. D. Haggard, M. D., Nashville.

THE SOUTH CAROLINA MEDICAL ASSOCIATION WILL MEET IN CHARLESTON S. C., ON APRIL 18th, 19th, 20th, 1911.

The officers of this association are as follows;

President Dr. James H. McIntosh, Columbia.

1st Vice-President—Dr. J. W. Jervey, Greenville.

2nd Vice-President—Dr. R. B. Epting, Greenwood.

3rd Vice-President—Dr. Rolfe E. Hughes, Laurens.

Treasurer—Dr. C. P. Aimar, Charleston.

Secretary—Dr. Edgar A. Hines, Seneca.

Chairman of Committee of Arrangement. —Dr. C. P. Aimar, Charleston.

The papers that will be read are:

Address:

Dr. Alexander Lambert, New York City,

Address:

Dr. Judson Daland, Philadelphia Pa.

PAPERS BY MEMBERS AND OTHERS.

1. "Myoma with Pregnancy; Report of Case", Dr. H. R. Black, Spartanburg.

2. "The Transmissible Diseases—Their Etiology and Prophylaxis.", Major F. C. Baker, U. S. A., Charleston.

3. "The Treatment of Alcoholism; Who Shall Treat It?" Dr. Walter Cheyne, Sumter.

4. "Infantile Scorbutus", Dr. William Weston, Columbia.

5. "Typical Case of Raynaud's Disease", Dr. T. E. Wannamaker, Jr., Cheraw.

6. "The Woman Physician", Dr. Sophia Brunson, St. Matthews.

7. "The Surgeon", Dr. Theo. Maddox, Union.

8. "Herniotomy in Youth and Old Age" Dr. A. E. Baker, Charleston.

9. "The Treatment of Pneumonia", Dr. W. J. Burdell, Lugoff.

10. Dsscussion

Led by Dr. W. M. Lester, Columbia.

11. "Intestinal Gas Trocas; A New Instrument", Dr. A. B. Knowlton, Columbia.

12. "The Conservation of Sight", Dr. J. W. Jervey, Greenville.

13. "Ehrlich's New Remedy for Syphilis", Dr. T. P. Whaley, Charleston.

14. "School Inspection of Children", Dr. J. F. Townsend, Jr., Charleston.

15. "Medical Inspection of Schools", Dr. L. Rosa H. Gantt, Spartanburg.

16. "The Results of Medical Inspection in the Winthrop College Training School", Dr. Lois Boyd, Rock Hill.

17. "Hookworm Disease; Its Eradication in South Carolina", Dr. J. LaBruce Ward Columbia.

18. "A Plea for a More Conservative Surgery of the Ovary", Dr. Geo. H Bunch Columbia.

19. "Diphtheria Antitoxin with Special Reference to Intubation", Dr. E. W. Carpenter, Greenville.

20. "A Preliminary Report of Eight Cases of Pulmonary Tuberculosis Treated by Injecting Nitrogen Into the Pleural Cavity", Dr. Mary E, Lapham, Highlands, N. C.

21. "The Successful Removal of Two Pieces of Steel from the Eye with Electro-Magnet", Dr. C. W. Kollock, Charleston.

22. "Congenital Dilation of the Colon; Giant Colon or Hirschsprung's Disease", Dr. C. M. Rees, Charleston.

23. "A Plea for Rural Sanitation" Dr. W. A. Boyd, Columbia.

24. "Report of Rare Clinical Cases", Dr. Edward F. Parker; Charleston.

25. Subject Unannounced, Dr. F. H. McLeod, Florence.

26, "Typhoid Fever", Dr. John Forest. Charleston.

27. "The Power of Nature to Cure; How to Make it Effective", Dr. Fillmore Moore, Aiken.

28. "Complications and Sequelae of Gall Bladder Diseases as the Result of Delayed Diagnosis", Dr. LeGrand Guerry, Columbia.

29. Subject Unannounced, Dr. Robert Wilson, Jr., Charleston.

30. "Bacterins and Sera; Their Influence in the Treatment of Disease", Dr. C. W. Barron, Columbia.

31. "Report of a Case of Parinaud's Conjunctivitis", Dr. J. E. Johnston, Chester.

32. "Pellagra—Its Different Diagnosis and an Exhibition of Lantern Slides of the Disease", Dr. J. J. Watson, Columbia.

33. Subject Unannounced. Dr. L. A. Griffith, Columbia.

34. "Acute Intussusception of Bowels; with Report of an Interesting Case", Dr. J. H. Taylor, Columbia.

35. "Report of Two Unusual Cases of Nasal Polyps, Occurring in Sisters, with Result of Killian Operation Upon One", Dr. C. W. Kollock, Charleston.

36. Subject Unannounced, Dr. F. M. Durham, Columbia.

37. "Preliminary Report of Cases Treated with Bacterins and Sera", Dr. C. W. Barron, Columbia.

38. "Medicine and Surgrry of the Ancient Hindus", Dr. J. H. Taylor, Columbia.

39. "A Sanitary Water Closet for Rural Use", Dr. W. J. Burdell, Lugoff.

40. "Vaccines in the Treatment of Genito-Urinary Diseases of Women and Children", Dr. C. W. Barron, Columbia.

41. "Breaches", Dr. T. L. W. Bailey, Clinton.

EDITORIAL NEWS ITEMS.

Dr. R. S. Cauthen has recently moved to Charlotte, N. C., and has offices in the Realty building. His practice will be limited to Eye, Ear, Nose and Throat diseases. Dr. Cauthen is a prominent practitioner, and we have every reason to believe that he will be very successful in Charlotte.

Association of Sugens of the Southern Railway.

The next meeting of this Association will take place at Charlotte, N. C., on May 29, 30, 31, 1911. Dr. J. U. Ray, the Secretary, already has the titles of a number of very fine papers, and there is every reason to believe that the forthcoming meeting will be the best in the history of the Association.

Governor Brown has appointed Dr. F. M. Ridley of LaGrange, and Dr. J. W. Palmer of Alley, members of the Allopathic board of medical examiners of Ga. for three years from January 7, 1911. Dr. Ridley was reappointed, Dr. Palmer succeeds Dr. I. H. Goss.

Quotation from South Carolina State Medical Journal.

"High Point, N. C., Jan. 12.—A rather strange discovery in medical science was made here yesterday afternoon—one that was a little puzzling to the physicians present. At the Junior Order Hospital, Drs. Burrus, Duncan and Reitzel performed an operation on a woman for appendicitis and instead of finding the appendix on the right side, which is the normal location, it was found on the extreme left side. The physicians say it is the first case of this kind they have ever seen. The patient is doing nicely to-day."

Dr. Jno. Thames has recently located in Wilmington, N. C. His practice will be limited to the diseases of Women and Children. Dr. Thames is a very prosperous physician, and we have every reason to believe that he will do well in Wilmington.

Deaths.

Dr. William Warren Potter.

Dr. William Warren Potter, Editor of the Buffalo Medical Journal, died at Buffalo, N. Y. on Tuesday, March 14, 1911, after an illness of a few weeks, aged 72 years.

Dr. Potter's life was one of activity and his high professional attainments made him prominent in the fields of medicine, surgery and literature will be a lasting one, His career was foreshadowed as to its success and the line of achievement by his lineage, since his father, his grandfather, and his greatgrandfather, not to mention collateral issue, were all distinguished physicians.

He was born at Strykersville, N. Y., December 31, 1838, and was the son of Dr. Lindorf and Mary Green (Blanchard) Potter. His academic education was received at Arcade Seminary N. Y., and at Genesee Seminary and College, Lima, N. Y. He then entered the medical department of the University of Buffalo from which he received his degree in 1859. Upon the completion of his medical studies he formed a partnership with his uncle, Dr. Milton E. Potter, of Cowlesville, N. Y., and began the practice of medicine.

At the beginning of the civil war, Dr. Potter offered his services to the government. He passed the examination of the army board at Albany a few days after

Fort Sumter was taken and in the summer of 1861 was commissioned assistant surgeon of the 19th regiment, New York volunteers; he served in the army of the Potomac under McClellan during the Peninsula and Antietam campaigns and under Burnside in the Fredericksburg disaster; was left in charge of wounded soldiers while army was retreating to Harrison's Landing; was captured by confederates June 30, 1862, and had an interesting interview with Stonewall Jackson. He was confined in Libby Prison, but was soon exchanged, and returned to his regiment. In December, 1862, he was promoted to the rank of surgeon and served with the 57th regiment, N. Y., volunteers, during the Chancellorsville and Gettysburg campaigns. Soon after the battle of Gettysburg he was assigned to the charge of the 1st division hospital, 2d army corps, and continued on that duty until mustered out of service with his regiment at the close of the war. He was brevetted by the President of the United States, for faithful and meritorious service, lieutenant colonel of United States volunteers, and by the governor of New York State, for like reasons, lieutenant colonel of New York volunteers.

Returning to civil life Dr. Potter practised his profession at Mount Morris, and at Batavia, N. Y., for a time, but soon returned to Buffalo, limiting his practice to diseases of women. In July, 1888, he became editor of the Buffalo Medical Journal and shortly thereafter owner as well. He was one of the founders of the American Association of Obstetricians and Gynecologists, of which he was secretary and editor of its transactions from its organization in 1888. He was a frequent contributor to medicinal literature and often was invited to address the more important medical bodies of the country.

One of the most valuable services rendered by Dr. Potter to the medical profession was his participation in the struggle for the establishment of the New York State Medical Examining Board. During those days of factional opposition. Dr. Potter spent much time at Albany lending his aid in favor of the bill which was finally passed by the legislature, signed by the Governor, and went into effect September 1, 1891, serving as the basis of the present system of state medical examination. Dr. Potter was appointed examiner in obstetrics and gyneyology of the board, and since 1897 has also been president.

Dr. Potter was a member of the American Medical Association (chairman of the Section of the Diseases of Women, (1890); Medical Society State of New York (president 1891); Medical Society County of Erie (president, 1893); Buffalo Medical and Surgical Association (president 1886); Buffalo Obstetrical Society, 1884-1886; president Section Gynecology and Abdominal Surgery, First Pan-American Medical Congress, 1893; president of the National Confederation of Medical Examining and Licensing Boards, 1895-1899; secretary of the American Association of Obstetricians and Gynecologists since 1888, examiner in obstetrics and gynecology, New York State Board of Medical Examiners, and president since 1897.

Among hospital appointments held was that of consulting surgeon to the Buffalo General Hospital. Dr. Potter was a companion of the Military Order of the Loyal Legion of the United States; a member of Bidwell-Wilkinson Post, G. A. R.; and of the Army and Navy Club, New York.

Book Notices.

Just published A Manual of Cystoscopy by J. Bentley Squier, M. D., Professor of G-U Surgery, New York Post-Graduate Medical School and Hospital; Surgeon to Work House Hospital and Home for Aged and Infirm, Department of Charities and Corrections, New York; Consulting Surgeons, New York Neurological Hospital; Fellow American Association of G-U Surgeons; Fellow New York Academy of Medicine, and Henry G. Bugbee, M. D., Instructor in G-U Surgery, New York Post-Graduate Medical School and Hospital; formerly Surgeon in Chief, Vassar Brothers Hospital, Poughkeepsie; Fellow New York Academy of Medine. With twenty-six original plates, eighteen of which are colored. Octavo' Flexible Leather $3.00 net. (Sent prepaid on receipt of price.) Paul B. Hoeber, Medical Publisher, Bookseller and Importer, 69 East 59th St. New York.

This book has been written in response to the repeated applications from our students for a short practical work on cystoscopy.

The statements are concise, and the technique described in detail is that which we have found most satisfactory after a thorough trial of other methods. While the essentials of a working knowledge of the instruments are set forth, the book has been kept within small compass.

The feature of anatomical diagrams accompanying the principal bladder landmarks, as depicted through the cystoscope, will be of great value to the beginner, and the colored plates of intra-ve icle lesions

are particularly accurate, having been produced under the direct observation of the artist.

Compend of Gynecology by William Hughes Wells, M. D., Associate in Obstetrics in the Jefferson Medical College; Assistant Obstetrician in the Jefferson Medical College Hospital; Fellow of the College of Physicians of Philadelphia, Etc. Fourth edition, revised and enelarged with 153 illustrations. Philadelphia, P. Blackiston's Son & Co., 1012 Walnut street.

Several chapters have been eliminated from edition of this little volume, and much valuable matter has been added to other chapters. The text has been thoroughly revised, and it occurs to us that it is now quite complete.

The illustrations and binding are quite attractive, and we feel convinced that a study of its contents will be of value to any physician.

Text-Book of Massage by L. L. Despard member and Examiner Society of Trained Masseurers, London, Henry Frowde, Oxford University Press, Holder & Stroughton, Warwick Square, E. C. 1911.

This volume contains an unusual amount of instructive reading matter, which will be found of untold value to any Masseure.

Massage has now secured its position as a recognized therapeutic measure in both medical and surgical cases; but it is an agent which, if it is to be used to advantage, must be employed with knowledge and skill, as well as a perfect attention to detail.

This volume with its numerous illustrations will be found of great benefit to masseurs.

We take pleasure in recommending this book to our readers.

Hankbook of the Surgery of the Kidneys, by W. Bruce Clarke, M. A., M. B. (oxon), F. R. C. S., Senior Surgeon to St. Bartholamew's Hospital; formerly Surgeon to West London Hospital, and to St. Peters Hospital for Stone and other Diseases of the Urinary Tract; Member of the Council and of the court of Examiners of the Royal College of Surgeons of England; formerly Examiner in Surgery to the University of Oxford. With 5 plates and 50 illustrations in the text. Henry Frowde, Oxford University Press. Hodder and Sloughton, Warwick Square, E. C. 1911.

The views expressed in this volume were arrived at by the author, after some years of experience.

The records in this book are mainly the writers personal ones, and he has only made special allusions to the views of others when it seemed desirable to do so either because they differed radically from his own.

The book is intended as a handbook of present-day practice for busy practitioners instead of an encyclopedia of the progress of renal surgery.

It gives us a great deal of pleasure to say to our readers that this book seems to us to be very comptete in its attractive binding. The illustrations are above the ordinary.

Compend of Gynecology, by William Hughes Wells, M. D., Associate in Obstetrics in Jefferson Medical College; Assistant Obstetrician in the Jefferson Medical College Hospital; Fellow of the College of Physicians of Philadelphia, etc. Fourth edition, revised and enlarged with 153 Illustrations. Philadelphia, P. Blakiston's Son & Co., 1012 Walnut Street, 1911.

In the revision of this book for the fourth edition, the author has eliminated several operations and methods of technic which are now out of date.

The surgical treatment of Diseases of Women has so enlarged its scope of work that a very large amount of literature must be gone over to pick out the methods taught by the best teachers, for a book of this sort is not intended so much to show original work as to condense and sum up the methods used by the principal operators and teachers of gynecology. This the author has tried to do, and we feel that he has accomplished his aim.

The book contains 290 pages of carefully indexed reading matter, and every physician will find this volume of great value.

Transactions of the American Surgical Association Volume the twenty-eighth edited by Archibald Macharen, M. D., Recorder of the Association. For sale by William J. Darnau, Philadelphia.

Like all former issues of The Transactions of the American Surgical Association, this volume contains papers of immense scientific value.

One paper we wish to call especial attention to is entitled, "End-to-End Intestinal Anastomosis by the Invagination Method," by Dr. Chas. L. Gibson, of New York City. This paper is of great value, and the illustrations brought out in this article are exceedingly clear, and are well put.

There are many other important papers

contained in this volume, some of which are: "Postoperative Intestinal Obstruction," by George Wooley, M.D., New York City; "Saroena of the Claciple; End Results Following Total Excision," by Wm. B. Coley, M. D., New York City; "The Etiology of the Ptoses and Their Relation to Neurasthenia," by Edward Reynolds, M. D., Boston; "The Method of Overcoming in Old Fractures Treated by the Open Method", by Edward Martin, M. D., Philadelphia.

The volume is neatly bound, thoroughly indexed, and the illustrations are very good indeed.

Inebriety, A Clinical treatise on the Etiology, Symptomology, Neurosis, Psychosis and Treatment and the Medico-Legal Relations by T. D. Crothers, M. D., Supt. Walnut Lodge Hospital, Hartford, Conn. Editor of the Journal of Inebriety, Author of Morphinism and Narcomania, Drug Habits and their Treatment. etc., Recording Secretary of the American Medical Society for the Study of Alcohol and other Narcotics, Member of the American Medical Association, The British Medical Association Honorable, member of the British Society for the Study of Inebriety, etc., etc. 1911. Harvey Publishing Company, Cincinnati, Ohio.

This volume, touching upon one of the greatest medical and social science problems, confronting the present age, is one of great value to the Medical profession, and should be in every physicians library.

The studies and conclusions embodied in this volume are the results of a practical experience beginning in 1875 when the author was Assistant Physician in the New York State Inebriate Asylum, at Binghampton, N. Y., and extending from 1878 up to the present time as Superintentdent of Walnut Lodge Hospital, Hartford, Conn. In addition to this the author's work as editor of The Journal or Inebrieiy, has furnished him a somewhat intimate acquaintance with the scientific literature on this subject, both in this country and in Europe,

The volume is nicely bound and will be found of great interest and value. We gladly recommend the book to our readers.

The Gulick Hygiene Series by Charlotte Velter Gulick, Ginn &Company Boston, New York, Chicago, London.

In this series we have five volumes, namely, Book I Good Health; Book II Emergencies; Book III Town and City; Book IV The Body at Work; Book V Control of Body and Mind.

There is an immense amount of practical reading matter contained in these volumes, and it is so simply expressed until a fourth grade school boy can understand it.

The binding and illustrations add much to the neatness of these books.

We are glad to have an opportunity of recommending this series of books to our readers.

The Blues (Splanchnic Neurasthenia) Causes and Cure, Albert Abrams. A. M., M. D., (Heidlberg), F. R. M. S. Consulting Physician, Denver National Hospital for Consumptives, The Mount Zion and the French Hospitals, San Francisco; President of the Emanuel Sisterhood Polyclinic, Formerly Professor of Pathology and director of the Medical Clinic, Medical College, San Francisco. Illustrated, Fourth Edition, Revised and Enlarged.

Many new ideas and experiences have been added in this, the fourth edition of this little volume entitled "The Blues"

The object of this book is to direct attention to a new variety of nerve exhaustion, which the author has designated as Splanchic Neurasthenia.

This volume contains 9 chapters on the various symptoms and effect of nervous troubles.

It gives us a great deal of pleasure to recommend this volume to our readers. The book is complete in every respect and we feel confident that physicians will find it of great value in their cases of nervous diseases.

Lippincott's for April.

The fact that the April Lippincott's contains a new complete novel by Will Levington Comfort, author of "Routledge Rides Alone," is sufficient to make the magazine of extraordinary interest to the the thousands who have enjoyed that "best-selling" book, but in addition that interest is amply "backed np by the general excellence of the rest of its contents. Mr. Comfort's new novel is called "The Rising Road," and it is characterized by the same strength of plot, vivid scenic effects, and excellent character-drawing, which earned for "Routledge" its well-deserved popularity. The scenes are laid in an island of the Philippines, where the natives are in revolt against the American occupation. The leader of the Fillipinos is a renegade Spaniard with whose daughter the American hero is in love. The road they traverse to happiness is a thorny one, but all turns out happily in the end, nor would the reader have it otherwise.

There are seven short stories in the issue,

and all are so good that it is hard to pick out any that it is hard to pick out any that are worthy of special mention. "The Heel of Achilles" is by John Reed Scott, author of "The Colonel of the Red Huzzars," "Beatrix of Clare," "The Impostor," etc. "The Other Fat Lady—and Me" is an amusing story of child life, by Augusta Kortrecht, who wrote "A Dixie Rose." Then there are "Through the Window," by Will Irwin; "The Avoided Visit of Carolyn," by Maude Zella Herrick; "It," by Nan Maury Lemmon; "Light Running," by Mark F. Wilcox; and "The Mote in the Eye," by Gertrude Morrison.

Edwin L. Sabin contributes a humorous and memory-invoking sketch called "In Defense of Spring." Forbes Lindsay, in "A Harvest of Tares," comments on a vital situation of international importance. Colnel Willard French is twice represented, by "Speaking of Conservation—Forest Fires!" and "Parting with Politics." Joseph M. Rogers writes of "Styles in Amusements," and James M. Flanders, of "The Great Power of a Little Book."

Among the poems are two by John Kendrick Bangs—"Shakespeare's Birthday" and "A Woodland Easter"—and others by Sara Teasdale, Hilton R. Greer, Charles Hanson Towne, and Joseph W. Dorr. The usual sixteen pages of new humorous matter close the number which is in all respects praiseworthy.

Abstracts of the Leading articles of the month.

Lactic Acid Bacteria in Arteriosclerosis.

Metchnikoff has continued his research on the poisons generated by the ordinary bacteria in the intestines, and believes that his experiments have now established beyond question that small doset of paracresol and indol, acting on the organism over a longer or shorter period, are capable of inducing chronic lesions of the nature of sclerosis. Such lesions are the very ones that are most frequently encountered in senility. His latest experimental and chemchemical research further demonstates that the phenols and indol found in the stool and urine are not the excreta of our tissues, but are the products of the permanent microbian flora. He declares it is not unreasonable to assume that the digestive tract can constantly harbor an injurious flora, the source of chronic poisoning leading to arteriosclerosis; helminths are so frequent among certain primitive peoples that they may almost be regarded as the normal "phsiologic" fauna, and yet they are liable at any moment to entail more or less serious disturbances. Mathis and Leges announced last year that they found helminths in every native examined in Indo-China. It is established now beyond question that the Bacillus perlringens and the colon bacillus produce poisons which can be absorbed by the normal walls of the intestines and are capable of inducing serious lesions in vital organs, arteries, kidneys, liver, etc. He then discusses how to prevent this injurious action from the poisons thus engendered in the intestines. These same lesions occur in the horse and rabbit, which eat no meat; consequently, a meat diet cannot be the main cause, and experiences are showing that with a mixed diet there is really less production of these poisons. On the other hand, it seems to be possible to check the production of indol by these bacilli by fighting them with certain other bacilli, especially lactic-acid bacteria. The simultaneous presence of Bulgarian lactic-acid bacilli in a culture medium with the colon bacilli seems to render it impossible for the latter to attack the nitrogenous elements in the medium, and hence there is no production of substance of the aromatic series. Metchnikoff reiterates that it is on this principle of letting Greek fight Greek that we may hope to find the solution of the problem of the suppression of the poisons which are responsible for the development of the sclerosis in our organs, and consequen.ly of their premature wearing-out.—Annales de l'Institut Pasteur.

Urine in Carcinoma.

Drs. Salomon and Sayl presented to the Gesellschaft der Aerzte in Wien, on December 10, 1909, a preliminary report on the characteristic state of the urine in carcinoma-patients. They found in the urine of such patients an increase of the oxyproteine acids amounting to from 2 to 3 1-2 percent in the nitrogen of the urine excreted by them. The relative quantity of the excreted acids in proportion to the nitrogen found in the urine remains constant and is not affected by either the nitrogen of the ingested food nor by starvation, cachexia, exudations, and cell-disintegration. The oxyprotein acids are derivatives from albumin and are very likely polypeptides. The quantity of these acids is far less in the urine of healthy and sick individuals than in the urine of carcinoma patients. It is remarkable that pregnant women also excrete greater quantities of oxyprotein acids with their urine. The spoken-of condition of the urine denotes a specific disturbance in the decomposition of the albumin in carcinoma-patients. Dr. Freund called attention to the investigations made by Toepfer, and said that in his laboratory the condi-

tions mentioned are made use of in the diagnosis of carcinoma.—Wiener Med. Wochenschr.

Palpable Arteries in Children.

In the Munchener Medizinsche Wochenschrift, Dr. Hamburger draws attention to a curious phenomenon he has observed in children. Under normal conditions the walls of the superficial arteries, such as the radial or temporal, cannot be felt on palpation; one only feels the pulse, that is, the contraction of the artery, but not the arterial wall itself. In certain cases, however, the author states that he has been able definitely to the walls of the temporal and radial arteries and to convince himself or a certain degree of rigidity of the walls. He is of opinion that this rigidity is in no way of the nature of an arterio-sclerosis, but of a spasmodic kind, as it is very variable and may be accentuated at one moment and disappear entirely the next. He suggests that it arises from a certain tonicity of the vascular musculature and is a manifestation of a general neurotic or neurasthenic condition. Most of the cases were children of an irritable temperament, complaining frequently of headaches, palpitations, complaining frequently of headaches palpitations, and the like. Other evidences of an exaggerated vaso motor irritability were generally present; sudden flushing or pallor of the face, cold extremities, frequent sweatings, dermographism, and irregular respiratory pulse.—The London Hospital Journal.

Experiments with Anaphylaxis of Gastric Juice.

Liverato experimented as to the effect of gastric juice from persons afflicted with cancer of the stomach and of other organs injected into the subdural region of guinea-pigs. The gastric juice was obtained from two cases of cancer of the uterus, one of cancer of the right thigh, and one of gastric cancer. He found that the gastric juice of the patients having cancer in other regions than the stomach injected into healthy pigs gave no effect of anaphylaxis. Neither was there any effect of extract of mammary cancer. But the gastric juice from the case of gastric cancer caused death when injected, and if injected into prepared animals caused anaphylaxis. Thus we see that the juice of patients having cancer in other parts of the body does not cause anaphylaxis, but that the juice from a stomach having gastric cancer does cause it.—Annali dell' Instituto Maragliano.

Our Last Legislature and the Public Health.

They increased the appropriation for the State Board of Health by $12,000, making the amount $22,000 annually. This was an increase of 120 per cent., but not as much as it ought to have been. They refused to appropriate $3,000 for free antitoxin for the treatment of diphtheria in the children of our State, but very willingly gave $2,000 for free treatment of hog cholera in North Carolina. Dr. C. O'H. Laughinghouse of Greenville, N. C., in a letter (private) to the Health Officer says: "Don't worry—the children of North Carolina are ahead of the hogs, for they have their fathers and mothers, the teachers and the doctors on their side, while the hogs only have the farmers, the Legislature, $2,000 and the cholera." While we appreciate the encouraging words from Dr. Laughinghouse, yet it is plain to a blind man that the members of the Legislature did not think a child as good as, nor worth as much as a hog.

Again, the Senate killed a bill that passed the House almost unanimousiy, providing for the completion of the State High School course, preliminary to the study of medicine. They also refused to pass a bill requiring the same preliminary educational qualification for the study of veterinary surgery. I suppose they argued that it would not be "politically expedient" to requite a better education for those who were to treat the dogs, hogs and jackasses, than for those who were to treat human beings, even if they had already declared that the hog was better than the child. But the Legislature was not an unmixed evil—they increased the appropriations to the State Tuberculosis Sanitorium, to the the Jackson Training School and to the various eleemosynary institutions of the State. Made valuable amendments to the quarantine and other health laws of the State. They passed a law creating a "sanitary district" for West Asheville. This is a new and valuable departure for the machinery and money to enforce proper sanitation. It is not unlike the special school districts. The community will vote for whatever tax they need and it will administered by a commission, under the direction of the County and State Board of Health. This could be made applicable to any community, in any state and we believe it will become very popular as soon as it becomes known. We congratulate West Asheville, our enterprising neighbor just across the river, and if we can be of any assistance, we are yours to command. We hope to see you get busy at once and make good in this new venture, as you have done in all other things attempted. Perhaps the most important enactment of the last Legislature was the establishment of a training school for feeble

minded. This is a long step forward and will be of untold benefit to the State and her citizenship. Strange to say, Speaker Dowd came down out of his chair and fought this bill on the floor of the House, but with all of his influence, he could only muster about fifteen votes against the measure. Asheville's Health officer was made a member of the Board of Trustees. By the way! why not make an effort to bring this Institution to Asheville or near here? This suggestion is respectfully brought to the attention of the Board of Trade and the Retail Merchants Association. Get busy, gentlemen, if you think it worth your while. Greensboro has already started.

Let me record my appreciation of the intelligent and proper stand taken on all these measures by our Senator and Representatives from Buncombe. Senator Martin and Representatives Williams and Roberts could always be found on the side of right, justice and progress. They all took a high stand and wielded a strong influence for good, during the entire session, and had the respect and esteem of all the members. —The Bulletin of Health, Asheville, N. C.

Kraurosis and Leucoplakic Vulvitis.

Jayle and Bender (Rev. de Gynec. et de chir abdom.) entirely disagree with Birkley and Bonney, who stated recently, (Proc. Roy. Sec. Med.) that "white kraurosis is undoubtedly a misnomer for leucoplakic vulvitis." They maintain that there are cases where kraurosis and leucoplakia coexist. The former may prevail over the latter. or vice versa, whilst the two diseases may be equally developed. Jayle and Bender report two cases where the disease coexisted; histological examination of the affected tissues proved this existence. The first patient was not quite forty years of age; there was marked sclerosis of the introitus, which never had time to advance till it assumed the characteristic appearances of uncomplicated kraurosis vulvae, because there was a distinct patch of leucoplakia of the vulva which rapidly underwent cancerous degeneration, with recurrence after operation. The second patient was forty-eight years of age, subject to leucoplaeic vulvitis for seven years; there was distinct kraurosis, but no distant line of demarcation between the two morbid areas. Leucoplakic changes were certainly most accentuated on the surface of the labia majora and minora, whilst the sclerotic changes due to kraurosis extended up the vaginal mucosa as far as the cervix, but they blended near the introitus. The clinical symptom of the two diseases were also co-existent. In short, this was a genuine example of leucoplakic kraurosis. Jayle and Bender turning to older experiences, show that kraurosis vulvae may appear after double oophorectomy, and later on the labia may become the seat of leucoplakia. The latter complication prediposes the patient to cancer; kraurosis on the other hand, never appears to undergo malignant degeneration. Neither seem related to syphilis.

The Doctor's Top Hat.

Not so verp long since, even in rural districts, the medical man was easily recognizable to the stranger by his professional top hat and frock coat. Scarcely fifteen years ago the doctor was almost as unmistakable as the clergyman. There were few then who dared to break away from the conventional costume decreed by unwritten professional law, and those who did defy this canon generally suffered for their hardihood. Except herhaps in the height of summer the silk hat was almost obligatory upon the doctor, as much in small country towns as ih London and the large cities. But within the past dozen years a complete change has come over the country practitioner's costume; and the main cause of this revolution has been the advent of the motor-car. Except in larger towns the doctor's motor-car has killed the doctor's top-hat; and public and profession alike have accepted this change with equanimity. But there must be many old-fashioned country people who have experienced a real sense of loss in the passing of their doctor's professional uniform. And, indeed, with all it ovious faults, the top hat and its associated coat often seem to lend some additional dignity and impressiveness even to the most dignified and impressive members of our profession. The doctor above all men should pay great attention to his outward appearance—"for the apparel oft betrays the may." It is not humbug or charlatanary which impels him to look well-dressed and well groomed on all occasions; and this effect was certainly easier to obtaion in the old days before the ubiquitous motos-car swept the doctor's top hat into oblivion. To the young and inexperienced man the formal coat was often a definite help in acquiring the elusive "bedside manner," and in giving the best possible first impression to his patients and their friends- It is not actors alone who feet the advantage of being "dressed to the part." But the order has changed, and perhaps in a few years the top hat will be a thing of the past even in the heart of Harley Street itself.—London Hospital Journal.

Do Special Dangers Attend the Intravenous Injections of "606"?

Ehrlich (Much. med. Woch) does not

believe that the intravenous injection of "606" presents special dangers. He thinks that patients with very far advanced degenerative processes of the central nervous system form a special group in which treatment by arsenobenzol is contradicted. In the fatal case reported by Frankel and Growven, after intravenous injection there was extensive disease of the brain associated with marked myocardiai disease, and therefore Ehrlich does not think that it was a suitable case for the treatment. In two similar cases death has resulted after subcutaneous and intramuscular injections of the remedy. Ae thinks that small doses, from 0.3 to 0.5 gram, may be injected into the veins with safety when there is no serious disease of the brain, arteriosclerosis, or functional disturbance of the heart, particularly angina pectoris. He adds that the preferable technic may possibly be first an intravenous, followed in forty-eight hours by an intramuscular injection, thus dividing the dose in two portions.

The American Medical Editors' Association.

The forty-secohd annual meeting of this association will be held at the Alexandria Hotel, Los Angeles , Cal., on June 26 and 27th, unber the presidency of Dr. Joseph MacDonald, Jr., of New York. Special efforts are being put fourth to make this meeting one of the best in the history of the organication, and plans already matured enable the executive committe to assure those who will attend a most interesting session, both from a literary and a social point of view. The officers of the association are: President, Dr. Joseph MacDonold, Jr., of New York; first vice-president. Surgeon General Walter Wyman, of the Public Health and Marine Hospital Service; second vice-president, Dr. Thomas L. Stedman, of New York; secretary and treasurer, Dr. J. J. Taylor, of Philadelphia; executive committee, Dr. W. C. Abbott, of Chicago; Dr. C. L. Stevens, of Athens, Pa., and Dr. G. H. Kreidler, of Cincinnati, Walter Lindley, of Lou Angeles, is chairman of the local committee.

The "℞" of Prescriptions.

How many medical men when, in accordance with immemorial custom, they head their prescriptions with the symbol "℞," know that they are unconsciously perpetuating the practice of invoking the aid of Jupiter to the efficacy of their drugs? This, which has long been the accepted view, is supported by Dr. R. M. Lawrence in a chapter of his recent work on Primitive Psychotherapy devoted to the subject of ancient medical prescriptions. Dr. Lawrence believes that the medical ℞ is a synthesis of the initial R. of recipe and of the symbol 2ł which is one of the astrological denotations of the planet Jupiter. "From very early time," he says, "it was a universal custom to place at the beginning of a medical prescription certain religious verses or superstitious characters, which formed the invocation of prayer to a favorite deity." A counter claim has recently been made on behalf of the Egyptian sun god Ra, but does not seem to be well founded. It appears that the astrological signs were well founded. It appears that the astrological signs were thus introduced in the reign of Nero, and Dr. Lawrence inters that Christian physicians may have been constrained to conform to the pagan practice of prefixing to their prescriptions invocations to Jupiter. The language teemed with words for example, "jovial," "mercurial," "saturine," disastrous"—testifying to the former universality of the belief in planetary influences. Among the various interpretations of the symbol ℞. that of Johan Michaul Moscherosch (1600 69), also cited in the work previously mentioned, is more humorous than complimentary to the faculty. He maintained that it is equivaient to Pdc., an abreviation standing for per decem. The appropriateness of the denotation was attributed by him to the fact that one prescription in ten might be expected to prove beneficial to the patient. The symbol "℞" was not always universally employed, however, even during the Middle Ages. Dr. Otto Wall. in his work entitled The Prescription, states that during the sixteenth century physicians, either through piety or in fear of the Inquisition, frequentlv used the sign of the cross as a superscription. Others replaced the symbol of Jupitor by the Greek letters AU; J. D., for juvante deo; C. D., for cum deo; or N. D., for nomine dei. Whatever conclusion may be formed as to the origin of the symbol now in vogue, there caa be no doubt that the physicians of antinvity commonly headed their prescriptions with an invocation to some deity, nor, therefore, of the correctness of Dr. Lawrence's contention that modern medical prescriptions may be classed as the lineal descendants of the healing spells of former ages."—British Medical Journal.

Thrombotic Softening as a Cause of Acute Myelitis.

Bastin concludes that the evidence seems to be overwhelming that in the great majority of cases of acute myelitis, and also of acute poliomyelitis, the affection is caused not by an inflammation, but by thrombosis of some of the vessels of the spinal cord (where, in the latter disease, it is not due

to a special acute degenerative process). Certainly, in the former affection one has in the great majority of cases to do with thrombotic softening rather than with a true myelitis. This latter conclusion is rendered obvious (1) by the similarity of the morbid changes in question to those occuring in the brain which are due to thrombosis, as well as to the absence of any reason why a primary inflammation should be rare in the brain and common in the spinal cord. These strictly logical reasons are strongly reinforced by (2) the fact of the existence of special conditions favoring the occurence of thrombosis in the vessels of the spinal cord, and in just such parts of the cord as are most frequently affected; (3) by the fact that the disease is most commonly met with in just such persons and under just such conditions (as to heart's action, blood-vessels, and quality of blood) as are kuown to be favorable to the occurrence of thrombosis; (4) by the fact that the mode of onset and the early symptomatology of the affectton are wholly different srom what they would be had an inflammation of the cord actually existed; and finally (5) by the fact of the absence of any reasonable cause of inflammation, certainly in the majority of those in whom the malady makes its appearance.—The Eondon Medical Laucet.

Heart Disease in Pregnancy and the Puerperium.

Moran (Jour. of Obst. and Gynæc. of Brit. Emp.) mentions the dangers accompanying pregnancy in the subject of organic heart disease. While the prognosis is always grave for the mother and child, the result in a given case depends upon the valves affected, the amount of compensation the condition of the heart muscle and the general state of the patient. Crippled placental circulation is responsible for abortion in the early months, while asphyxia, often fatal to mother and child, may occur during labour. Post partum hæmorrhage and pulmonary œdema may cause death immediately after labour, while owing to diminished resistance acute endocarditis may supervene if puerperal infection occurs. The nature of the cardiac lesion has considerable influence on the clinical phenomena observed; mitral insufficiency predisposes to œdema and asystole; aortic insufficiency to syncope and epistaxis; mitral stenosis to cerebral embolism, hemiplegia and post-partum hæmorrhage. He says that pregnancy and parturition are dangerous to the cardiopath, and reports seven cases occurring in his own practice. In the management of the cardiopath, attention is drawn to the importance of careful and continual observation, and of guarding the patient against excitement, over-exertion, excessive exposure to cold. The skin should be kept active by a daily tepid bath and the bowels and kidneys carefully regulated. Pulmonary and renal congestion are to be guarded against by the wearing of proper clothing and the avoidance of sudden chills. When compensation fails he advises the usual medical measures, reserving induction of labour until viability of the child is reached. In the conduct of labour he advises a hypodermic of morphia during the second stage, with artificial assistance so as to avoid shock and sudden lowering of blood pressure. Immediately after deliverv a sand-bag should be placed on the abdomen to guard against the latter danger. The placenta should be allowed to be expelled spontaneously and no friction or kneading of the uterus practised but free bleeding favoured to relieve the disturbed circulation. Ergot must not be given. In regard to the cardiopath, the author is in full accord with the dictum of Peters: "No marriage for the unmarried, no pregnancy for the married, and no nursing for the confined."

Iodoform Inunction in Basic Meningitis

Mowat has been successful in the treatment of two cases of basic meningitis by a method of iodoform inunction. The first case was that of a boy, aged nine years, who contracted measles. When the rash had disappeared a temperature of 103° F. remained and the boy complained of severe frontal headache and stiffness of the neck. His neighbors were kept awake during the night by his shrieks, which were of the typical meningeal type. These passed off in two days and were replaced by constant moaning. He took no notice of his surroundings, except when sharply spoken to, when he replied to questions in a dazed fashion. He was very sick. Tache cerebrale was well marked, the muscles of the neck were rigid, while Kernig's sign was also present. An ointment was made up containing 15 grains of iodoform to the ounce of petrolatum, rubbed thoroughly into the back of his neck and posterior part of his scalp night and morning. He was given small doses of potassium iodide and bromide. Within the week his symptoms were greatly relieved and his temperature had fallen. Since then he has been in perfectly normal health.

The second case was that of a girl three years old. She was taken ill with severe diarrhea and vomiting, attributable to the eating of a sausage the previous day. Under treatment the diarrhea soon disappeared, but the sickness continued. She uttered

the meningeal cry and afterwards moaned. She took no notice of anyone except when she was spoken to. Her temperature rose to 102° F. Her tongue was clean. Tache cerebrale was present. Kernig's sign was apparent on the fourth day. She squinted and showed marked extensor reflex of the big toes. On the sixth day she sank into a comatose state. She was treated in the same manner as the former case, but when the state of coma was reached the author felt campelled to tell her parents that the case was hopeless. On the eighth day she awoke as from a natural sleep, spoke to her patents, and showed every sign of recovery. Since then she has had no relapse. Although her mother was told to apply the iodoform ointment twice a day she afterwards informed the author that she had done so four times within each 24 hours.—The London Lancet.

Acute Phosphorus Poisoning and Acidosis

H. L. Tidy emphasizes the connection between the secondary stage of acute phosphorus poisoning and acidosis. The toxic powers of phosphorus were formerly considered to be due to the withdrawal of oxygen from the tissues. The amount of oxygen necessary to oxidize a fatal dose is, however, very small, and this view is no longer held. The result of the process of oxidation is the important point. Phosphoric acid is very powerful and is nearly as strong as hydrochloric acid. The oxidation of phosphorus after absorption would result in the presence of this acid in the blood and tissues. Hutchison found that sodium dihydrogen phosphate was the most powerful practical drug for acidifying the urine, but the author has been unable to find any instance of poisoning with phosphoric acid or symptoms resulting from an overdose.

In the treatment of the secondary stage of phosphorus poisoning, the measures employed in treatment of acidosis should be adopted. The injection of normal saline solution and the administration of alkalies should be commenced as soon as the vomiting and purging of the primary stage subside.

The presence of excess of acids in the tissues in the later stages of phosphorus poisoning has, of course, been previously noticed. Thus Meyer found the alkalinity of the blood to be diminished, and ascribed this to the excess of lactic acid in the body resulting from insufficient oxidation. Munzer in 1891 and 1892 examined the urine in ten cases of acute phosphorus poisoning, and found a high percentage of amonia nitrogen. In two cases he gave sodium bicarbonate and noted the reduction in this percentage, as must, of course, necessarily occur. The treatment was apparently tried for experimental purposes, in order to observe its effect on the excretion of ammonia. It was not persisted with, nor was it employed in a subsequent case. This was before much attention had been given to acidosis. Possibly other cases have been treated with alkalies, but the author has not been able to find any record of such.

A close connection between poisoning by phosphorus and arsenic is often assumed to exist. In acute arsenical poisoning there is no occurrence of a secondary stage, and post mortem no changes are found in the liver resembling acute yellow atrophy or phosphorus poisoning. There is no evidence that fatty degeneration occurs to any extent, except in the alimentary canal, in cases of uncomplicated poisoning with arsenic. Thus there is no reason to belisve that acute arsenical poisoning has any relation to acidosis, and no evidence that chronic forms are connected with it.—The London Medical Journal.

Inherited Diatheses in Children.

Heim (Berliner klinische Wochenschrift) says that children in times past have done well on a diet of eggs, milk, meat and butter, and although some still thrive on such a diet, fully 70% of children so fed now would grow thin and lose appetite. It such children are fed with fat, or are overfed, there is likely to follow eczema urticaria, prurigo, coryza or recurring pharyngitis, adenoids, mucous stools and bronchitis, while if fat be restricted the symptoms disappear. It is the fat of cow's milk which causes most trouble. Since, through Czerny's teachings, the children of Breslau, if they showed signs of exudative diathesis, have been treated with a proper diet, the number of cases of scarlet fever in that city has fallen greatly. The author believes that the severe cases of scarlet fever occur only in children with exudative diathesis with a neuropathic tendency which later is recognized by flabby muscles, floating tenth rib, nervousness and variable temperature. With this neuropathic tendency the chagen from breast to cow's milk is often of benefit. In the pure neuropathic constitution artificial feeding should be used. Any fat will be injurious to the exudative diathesis which accompanies it usually. These cases should have whey or mixed whey or buttermilk diet, but they are little benefitted by change in diet and are usually carried off by some intercurrent infection. Heim believes that in the future, study of these constitutional tendencies will greatly benefit the health of the coming generation.

"Castor Oil as Sweet as Honey."

San Francisco, California.—Have used Laxol, and am much pleased with same. I had the curiosity to make a chemical examination of your product and find it to be a pure castor oil as sweet as honey. On the whole, I believe you deserve congratulations on the beauty and palatability of your product.

Late Assist. Police Surgeon, San Francisco.

Edward H. Samuels, M. D.

Treatment of Acidosis.

Sodium bicarbonate is quite commonly used in the acidosis of diabetes, to neutralize the excessive amounts of acid formed in the system owing to faulty metabolism. This salt has, however, many disadvantages. It is difficult to take in the large quantities necessary and the excessive formation of gas in the stomach is very disagreeable. Frequently, diarrhea appears and the acidosis will be aggravated by the gastro-intestinal disturbance and the inabillty to take food. Owing to its strong alkalinity, the salt is not suited for subcutaneous use. L. Lichtwitz finds that sodium citrate in slightly larger dose (up to 50 Gm. daily) is just as efficient as the bicarbonate and causes no gastric distress or diarrhea. It is pleasant to take and can be added to many articles of food without affecting palatability or may be administered with lemon juice. It is probable that the sodium acetate and tartrate have a similar effect. All these salts also have a direct inhibitory effect upon the acidosis. They may also be introduced subcutaneously without pain or danger of necrosis.—Therap. Monatshft.

Physiological Role of Calcium Salts.

O Loew has discovered that the toxicity of potassium oxalate is due solely to the fact that it is converted into insoluble calcium oxalate in contact with living matter and thus binds the highly necessary calcium. If algæ are placed in even dilute solutions of the salt, the nucleus will rapidly shrink, probably because the calcium salt of the nuclea-prteoid is decomposed. It seems that no other metal, not even the closely allied strontium, can take the place of the calcium in animal and plant physiology. Certain algæ do not require calcium for their development and for these oxalic acid is not a poison. Magnesium sulphate in a concentration of 2 per cent. is highly toxic since the magnesium will replace the calcium in organic combination. Another salt which acts as a toxic agent by the withdrawal of calcium is sodium fluoride, but this also unites with proteids directly. The larger the cell nucleus, the more calcium is present in the cell. The muscle cells of the lower animals possess quite large nuclei, hence contain more lime than the muscles higher animals. Similarly, glandular tissue is rich in nuclei and generally contains large amounts of lime, while red blood cells being free from nuclei, show only traces.—Muench. med. Woch.

Balsam of Peru.

Bickle (Australasian Medical Gazette) states that although the uses of the balsam are not very numerous internally it is used as a remedy for bronchitis with much purulent expectoration. The taste is disagreeable, but that can now be avoided by prescribing the drug in the form of capsules of 10 minims each.

Its greatest use has always been as an external application. It is used to destroy the acarus scabei, the cause of the skin trouble known as the itch. It can be applied pure or diluted with an equal quantity of castor oil. It is much more useful if employed after a hot bath. In cracked nipples it is almost a specific. He finds it most successful when combined with the old unguentum cetacei. One drachm of the balsam to seven of the ointment makes an excellent application. It it also useful in the same form for cracked lips, or as a stimulating application to indolent ulcers. As an addition to volatile inhalants in chest cases it is undoubtedly of value.

Apart from these medicinal qualities, it has another and a very useful one for medical men for their personal comfort. Combined with vaseline or some other petrol basis if used as a lubricant it prevents the objectionable persistence of disagreeable odors such as those of ulcerating carcinoma, of the axillary glands, of midwifery and of post-mortem work, etc. This is no slight advantage, as a single wash with ordinary soap after its use will leave one's hands quite free. Salol and spiritus vini rectificatus will also do this, but the effect on the hands is most injurious. It is distinctly antiseptic and contains both cinnamic and benzoic acids. The bactericidal effect is equal to about a two-per-cent carbolic acid solution, and it has a very inhibitory effect both on streptococci and staphylococci. He has used this drug for several years with the greasest comfort, and gets it put up in collapsible tubes. In midwifery cases if the perineum is harsh and tense the free lubrication with this ointment will soften the tissues wonderfully and prevent what seems otherwise to be an inevitable rupture.

Combined Quinine and Hydropathic Treatment of whooping-Cough,

Zangger (British Medical Journal) describes a method of treatment which has given satisfactory results in "several hundred" cases. It is based on what he considers to be the pathology of whooping-cough: "An infectious disease with a neurotic factor." To combat the infection he administers quinine in the form of a 1 to 2 per cent solution of quinine hydrochloride in doses of 2½ fluidrams (10 c.c.), given at 8 a. m., 2 p. m. and 6 p. m., in severe cases also at 11 a. m. The 1 per cent solution is easily administered, diluted with milk or water, to children under 1 year of age. For older children who object to the bitter taste he uses, instead, euquinine, administered in powders of 2 to 4 grains, three or four times daily. In treating the neurotic element he uses simple hydeopathic "packs," which have a sedative influence on the nervous system. They are applied as follows: Spread a child's blanket crossways over the bed, lay on it a sheet, once doubled, soaked in tepid water of 54 degrees (or even 52 degrees) to 60 degrees F., and well wrung out. Lay the patient on the sheet and wrap him in it; the wet pack must reach from the arm-pits to the knees, and be well covered by the blanket. The latter is fastened with safety pins, loosely enough so that the patient can sit up when a paroxysm comes on. The pack is applied at 6 or 7. p. m., renewed about 11 p. m., and left until morning. In cases where the cough is especially distressing later on in the night, it is applied at 9 or 10 p. m,, and removed two or three hours later when the first convulsive whoops again supervene.

The results claimed with this form of treatment are as follows: Convulsive stage of whooping-cough shortened to from ten to twenty days in medium and severe cases. The number of attacks in twenty-four hours rarely exceeds 20, and is rapidly reduced to 16, 12, 10, 8, etc. The intensity of the attacks diminishes, also the disposition to vomit. The only complication observed in the author's case was bronchitis. Half a dozen cases which came under treatment with bronchopneumonia as a complication rapidly recovered. The mortality was nil.

The quinine treatment was continued in half doses for several weeks after the convulsive stage in order to avoid relapses, and also as a general tonic.

Cholera.

Basil in the British Medical Journal says that in the treatment of cholera many facts must be remembered. In each epidemic the road tending to death must be studied. When people get rapidly livid, opiates must be avoided. What is sufficient at the beginning or end of an epidemic is not of any use in the middle-period type of the disease. The Dr. saw Smith use calomel invariably; Dr. Partridge ironically recommended rosewater. Both were mistaken, much can be done to save choleraic patients but frequent 10 grain doses of calomal are not suitable remedies.

In the earlier milder cases he has found salol and benzonaphthol very useful. In the epidemic of 1892 he saved many by chlorodyne or laudanum, but in 1903 he could not use them freely on account of the early uremic type of the disease. The Dr. says that he remembers many men living today who were near dying, and would probably have died, in spite of free use of salol, chlorodyne, etc., had he not resorted to the free use of creolin. The Dr. gave the liquid freshly dropped on flour—4 to 6 drops, rolled about in the flour by a stick, then turned on cigarette paper, gently enveloped in the paper, and swallowed. According to circumstances, he gave 4 to 6 doses of this balus, repeating every second or third hour. The author says he has read of others not having good results from creolin; some have pronounced it "horsy," but he is sure many would have died in 1892 who are alive today had he been afraid of using creolin. The drug must be used in the fresh state, as he described it. In many cases of inveterate diarrhea also creolin has given him good results. The Dr. has used it frequently since 1892.

Preparations of ether, valerianate of ammonium, friction, counter-irritation, packing in hot towels, etc., are useful to bring about reaction, but the temperature must be carefully watched. Anything above 102° F. is already grave (in cholera) and not much should be done to bring about overreaction.

The Dr. has tried the physiological serum in small and abundant quantities, and injected pints of it gradually or rapidly into the cellular tissues or into the peritoneal cavity. The Doctor has seen some patients saved by it; many others have died after even six or seven days of continual use of the serum. The author says it tends to add to the danger of uremic poisoning. He has frequently used a serum having much less sodium cloride than the usual proportion. He cannot say that this has given him better results. Some of his Persian friends used large enemata of tannin solution with good results. The writer has frequently restored the absent pulse by alcohol solutions of nitroglycerin, but the improvement has given no permanent solid results. Lactic acid is a good drink.

Pathologico-anatomic Alterations in the Spinal Cord in Herpes Zoster.

Dr. de Besche (Centralbl. f. allg. Path. u. path. Anat.) reports a fatal case of herpes zoster in a woman' 52 years old, of neurotic dicthesis. After three weeks of indefinit neuralgic pains and severe pains along the spine, a vesicular eruption appeared on the left side in the lumbar region extending from the spinal column toward the median line in front. This waa accompanied by aunitory and visual hallucinations, and on the eighth day after appearance of the eruption the patient became unconscious. There was no paralysis, but the patellar reflexes were increased and there were twitchings in both arms. The temperature was 39° C. The patient died in a comatose state.

The Relation of Heart Disease and Physchosis.

Saathoff (Muenchener Med, Wochenschrift), points out the occurrence of a fairly definite psychic affection in syphilitic individuals with valvular defects, developing under the influence of disturbed compensation. This psychosis composed, as a rule, of confusional phobias, halucinations, and motor excitement. The origin of the physchosis is referable to the combined effect of all the phenomena of failing compensation upon the brain, which is already damaged by the syphilitic process. But not all the psychosis in cardiac cases, for which another explanation is not available, are necessarily the result of an existing syphilis, as the possibility remains, at the present state of our knowledge, of non-specific valvular defects likewise entering into consideration. His observations, however serve, to give a more solid basis to a certain group of these psychoses, as noted in individuals suffering from heart disease, than has hitherto been afforded by the assumption of circulatory and nutritional disturbances of the brain, abnormal pulsations and states of general prostration. Meanwhile, it cannot be exactly ascertained whether and to what extent a part is played in this connection by an individual predisposition to psychic disturbances. At the same time, the meaning of the term "psychic predisposition" is beginning to be less vague than in the past, since it has been learned that this predisposition may be created by injurious factors which reach the brain from without.

Tonsillitis.

In the treatment of tonsillitis it is well to remember that this disease is at first only a local disturbance and if promptly and efficiently treated will remain so.

The systemic symptoms—fever, headache, etc., only develop when there is considerable infection taken up. Therefore the following course should be instituted early in the case. The first indication is to increase local circulation, and the best therapeutic agent is heat. In the first place confine the patient as much as possible to the house. Children should be put in bed. By staying indoors patient breathes warm air only, usually free from dust and other irritating substances. The external application of the hot water bag greatly increases the venous circulation and so relieves the congestion, as does also the drinking of hot water. This drinking bathes the parts as well as adding a large amount of water to the bowels and so increases the action of both bowels and kidneys, and washes out the infection as it is taken up by the system, the drinking of water also increases arterial tension which prevents stasis.

A local remedy must fill two requirements. A detergent antiseptic and a degree of permanency of effect. Many of the remedies are antiseptic, but they are not exosmotic enough to increase the circulation, or else their effect is too transient and their use tires the patient. Locally I have grown to use but one remedy and that is Glyco-Thymoline. I prescribe equal parts of Glyco-Thymoline and water to be used in an atomizer. I get better results with this than anything else I have used. I always use it in an atomizer because gargling is necessarily painful, while a spray is not. Glyco-Thymoline promptly relieves the dry congested condition, and by adhering to the tonsil protects it from external irritation. Its anodyne effect is immediate and lasting. I instruct my patient to use it frequently and because it is pleasant and its action prompt, I find that they need no other instruction but use it thoroughly. As Glyco-Thymoline is non-poisonous, it makes no difference as to how much is swallowed and its action does not upset the stomach, but tends rather to assist the destruction of any of the plugs that may be swallowed.

I find by this method of treatment that my cases are nearly all cured in twenty-four to thirty six hours. That I need no other medicament at all, because the system does not become clogged with toxines.

I report below two cases, not for their individuality, but because their prototypes are constantly occurring to every physician.

Baby J., child six years old, had been sick for two days and the previous day the mother had seen sore throat and treated it with salt, vinegar, etc., to which the child rebelled. When seen, I put the child on

spray of equal parts Glyco-Thymoline and hot water and allowed sipping of hot soups and liquids; advised use of spray every half to one hour. Next morning mother telephoned I need not come as the child was perfectly well.

Mr. H. K., subject to repeated attacks of tonsillitis, but refuses tonsillotomy because he is afraid it may injure his voice—he is a vocalist. Several months ago I recommended spraying the throat with Glyco-Thymoline one-third strength, twice daily and whenever the throat is at all sore to use it frequently. He has not had attack of sore throat all this winter.—Charles J. Drueck, M. D., Chicago, Ill., Prof. of Physiology at the Illinois School of Dentistry. Lecturer to the Nurses of Mercy Hospital.

Tedious Convalescence.

The tediousness of convalescence of la grippe and pneumonia shows with what force the disease has attacked the tissues of the body and to what low ebb it has brought the vital powers. If convolescence is to be shortened and the ability of the body to resist tuberculous processes is to be added to, resort must be had to such agents as will feed the tissues and make blood. For this purpose Cord. Ext. Ol. Morrhuae Comp. (Hagee) holds high favor with the profession.

A palatable preparation of cod liver oil to which are added the hypophosphites. Hagee's Cordial of the Extract of Cod Liver Oil Compound is not surpassed as a tissue food.

Announcement—Sanitary Values Placed on Various Styles of Toilets.

Sanitarians representing North Carolina and other southern states engaged in crusades against typhoid fever and hookworm disease, at a recent meeting in Atlanta, have agreed on a sanitary valuation for the various styles of privies ordinarily used. As typhoid fever, hookworm diseases and the dysenteries are carried in, and scattered with, human excrement, a privy which prevents the spread of these diseases has a high value.

Valuations expressed in percentages :—

Failure to have any kind of a privy on premises represents 0% sanitary value. The ordinary privy open behind, unprotected from flies, dogs, washing rains, etc., has 10% sanitary value.

The same style privy having a hinged flap in the rear coming down close to the ground is given a sanitary value of 25%.

A privy having a covered seat, a closed hinged door in the rear, and tubs of pails in which the excrement is collected for subsequent disposal, if not rigidly fly proof, is valued at 50%.

This same style Of privy, having a rigidly fly proof vault under the seat, and water tight tubs or pails, kept in good condition, is valued at 75%.

A sewer system, with water closets, and a septic tank arrangement in which oil barrels are used, known as the L. R. S. Privy, are valued 100%.

By writing Dr. Jno. A. Ferrell, Assistant Secretary to State Board of Health, Raleigh you may receive free an illustrated pamphlet giving the plans and specifications with a bill of the material for the best and cheapest kinds of Sanitary privies.

A Valuable Local Anesthetic in Ano-rectal Surgery.

In view of current interest in Quinine and Urea Hydrochloride as a local anesthetic, a report of Dr. Louis J. Hirschman, of Detroit, which appeared in a recent number of the Cincinnati Lancet-Clinic, has peculiar pertinency. Dr. Hirschman reports a total of 102 operations, comprising acute thrombotic hemorrhoids, internal hemorrhoids, interno-external hemorrhoids, external hemorrhoids, fistula in ano, perineal abscess, fissure in ano, excision of scar tissue, Ball's operation (pruritus ani), hypertrophied papillae, and inflamed Morgagnian crypts. Perfect results were obtained in every case so far as operative anesthesia was concerned, and in but seven cases was there any post-operative pain. The Doctor uses the one per-cent. solution in all of his cases of ano-rectal surgery when suturing of the skin is required. The technique of administration is the same as that with weak solutions of cocaine and eucaine.

Dr. Hirscham believes that the substitution of Quinine and Urea Hydrochloride for any of the other anesthetic salts hitherto employed will prove eminently satisfactory in all cases of ano-rectal surgery in which suturing of the integument is not required. He sums up its advantages as follows: It is soluble in water; it can be sterilized; it is equal to cocaine in anesthetic power; it is absolutely non-toxic; it has a pronounced hemostatic action; it produces persistent anesthesia; it is inexpensive.

Quinine and Urea Hydrochloride, in one-per cent. sterilized solution, is supplied by Parke, Davis & Co. in sealed glass ampoulous of five cubic centimeters capacity. An ampoule is opened by breaking off the tip, when the hypodermic needle can be inserted in the neck of the ampoule and the solution drawn into the syringe. Parke, Davis & Co., by the way, issue a sixteen-page brochure on "Local Anesthesia with Qui-

nine and Urea Hydrochloride" which should be in the hands of every physician and surgeon. The pamphlet details fully the uses of the new anesthetic, explains the technique of administration, and contains some valuable case reports. A copy may be obtained by writing the company at its home offices in Detroit.

Caesarean Section in the United Kingdom.

The whole of the January number of the British Journal of Obstetrics is devoted to a most valuable monograph by Dr. Amand Routh on Cæsarean section in this country, based upon the reports of 1,282 cases reported to him by the actual operators. The cases are always consecutive; that is, any operator's list is rejected unless it contains particulars of all his cases; unfortunately, several of the pioneers of this operation are now deceased, so that the table is necessarily imcomplete. The cases are analysed thoroughly from every standpoint; it is only possible here to select a very few interesting items from the paper. The maternal mortality before 1891 was 35.7 per cent.; thence to 1895, 27.7 per cent.; to the end of the century, 15 3 per cent.; from 1901 to 1905 it was 13.5 per cent.; and in the past five years in over seven hundred cases it has been only 8.1 per cent. The indications held by the various obstetricians to justify Cæsarean section are very numerous and diverse. It is noteworth that contracted pelvis was the indication in 1,058 out of 1,282 cases; fibroids account for 72 more, cancer of the cervix for 31, ovarian tumors for 28. Stenosis of the cervix led to Cæsarean section 7 times; placenta prævia 7 times; eclampsia 10 times; cancer of the rectum 8 times; pelvic tumours, such as osteomata and sarcomate, 15 times. Other indications occurred less often. For contracted pelvis the figures show plainly how important it is to operate either before labour or with the membranes unruptured. In such cases mortality (since 1891) is but 2.9 per cent.; whereas in the less favourable circumstances of ruptured membranes, frequently examinations, and attempts at delivery, the percentage of maternal deaths is 17.3.—The Hospital Journal, London.

The Talma Operation for Hepatic Cirrhosis.

Crede remarks that the reports of surgeons concerning the results of the operation are not very favorable. His experience has been somewhat similar to that of others. In his last case, however, he proceeded more radically than is the custom, in the belief that the failures were due at least in part to the fact that after the operation as generally performed the new blood vessels were neither large nor numerous enough to provide the required compensatory drainage. He wounded the anterior surface of the great omentum with the scissors for an area almost equal to that of his hand, tripped the peritoneum from the belly muscles over a corresponding area, and then united these bleeding surfaces with mattress sutures. By the end of four weeks a number of good sized vessels must have developed, for from that time the secretion of fluid in the belly cavity visibly lessened. The operation took place on November 2nd. Paracentesis was necessary once a week, and between the date of operation and 7th December the respective amounts of 7,500, 7,000, 4,500, 5,000, and 5,000 gms. of fluid were removed. Thenceforth the general condition materially improved. The patient was again tapped several times, but at longer intervals, the last being on 16th January. The liver dullness is now about normal and the patient has (by May 2nd) gained 9 pounds. He looks bright and health, his digestion is excellent, and he has returned to work.—Berl. Klin, Woch.

Treatment of Epistaxis.

In the Australasian Medical Gazette Boyd describes a simple method of plugging the nares for obstinate epistaxis which has resisted the usual routine of compression, cold or iced douching, smart purgation, and anterior plugging. He very truly remarks that the operation of posterior plugging as commonly performed is very unpleasant to the patient, and that it requires special instruments, which are nine times out of ten not procurable in an emergency. The plan he recommends is easily and quickly followed, and requires only strips of clean muslin and a pair of dressing forceps; it is said to be almost as efficient as Rose's bag, and hardly more than inconvenient to both patient and operator. A dry piece of fine-starched muslin about six inches square is wrapped round the points of a closed pair of dressing forceps, by placing the latter in the centre of the square and then folding the muslin round the blades umbrella-fashion. This is then passed through the nares until it impinges on the posterior pharyngeal wall; the forceps is then withdrawn. The edges of the muslin are spread out over the face, and the hollow cone inside the nose is rapidly plugged with small pieces of cotton wool soaked in any available styptic-vinegar in default of the more usual astringent drugs. If—says the author—it is not necessary to plug the post-nasal fossa, the muslin can be pulled very slightly forwards after the withdrawal of the forceps; so as to clear

the posterior wall of pressure before the plugs are introduced. This is worth bearing in mind, as it avoids the temporary deafness otherwise set up.—The Hospital, London.

The "City" Anemic.

The hard hum-drum city life, especially of those whose days are spent indoors, in offices, bending over desks, ledgers, and school books, is almost certain, sooner or later, to leave its traces upon the man, woman or child thus unfortunately situated. General sluggishness of metabolism, due to indoor confinement in a vitiated atmosphere, and lack of exercise, is followed by failing appetite and later by degenerative blood changes of anemic nature. While Pepto-Mangan (Gude) cannot, of course, remedy the cause of the anemia and general devitalization, it almost always assists materially in overcoming the anemic blood state, increases appetite and acts as a real tonic and general reconstructive. As Pepto-Mangan (Gude) is free from irritant effect upon digestion, it is readily borne and quickly absorbed and assimilated, and as it is non-astringent it does not cause or increase constipation.

The Liver in Scarlet Fever.

Hildebrandt (Munchener Medizinisch, Wochenschrift,) states that in the great majority of cases of scarlet fever the excretion of urobilin is pathologically increased. The urobilinuria follows quite accurately the curve of temperature, so that in general the urobilinura and the fever disappear simultaneously. The intensity of the urobilinuria likewise presents a certain, though not exclusive dependence on the height of the fever. During convalescence the excretion of urobilin is commonly no longer increased. The presence of urobilinuria is the simplest and surest indication of the presence of a parenchymatous hepatitis, which occurs without icterus or bilirubinuria, and he urges that it is quite possible for the hepatitis of scarlet fever to hold the same noxious importance in the pathogenetis of cirrhosis of the liver that the nephritis of scarlet fever holds in the development of a chronic nephritis.

The After Treatment of Catarrhal Colds, Etc.

The various colds, "grippes", and catarrhs, that afflict the respiratory mucous membsanes during the winter months, are extremely likely to leave their traces upon the general systemic vitality, in the form of a greater or lesser degree of Anemia.

This is especially true of those whose reristance is "below par", i.e., elderl,y people, young ill nourished children and weaklings from whatever cause. The constitutional after-treatment of respiratory disorders, among this class of patients, is usually more honored in the breach than in the observance. There can be no better routine practice than to order Pepto-Mangan (Gude) as a general tonic and reconstituent, especially when Anemia is apparent. This exceedingly pleasant and ferruginous reconstructive is so distinctly palatable as to render it generally acceptable to all patients, and is so entirely free from irritant properties as to insure its ready toleration without causing constipation or disturbance of digestion.

Modern Martial Therapy.

Amid the veritable swarm of new medicinal agents of all varities that have been introduced to the therapist during the last twenty years, and in spite of the great advances in general medicine during the same period, there has not as yet been proposed any remedy which can successfully compete with iron in the treatment of anemic and generally devitalized conditions, This metallic element, in one form or another, is still the sheet anchor in such cases, and when intelligently administered in proper form and dosage can be depended upon to bring about marked improvement, provided serious incurable organic disease is not the operative cause of the existing blood impoverishment. The form in which to administer iron is, however, very important. The old, irritant, astringent martial medication has had its day, and properly so. Probably the most generally acceptable of all iron products is Pepto-Mangan (Gude), an organic combination of iron and manganese with assimilable peptones.

The preparation is palatable, readily tolerable, promptly absorbable, non-irritant and still distinctly potent as a blood builder and general tonic and reconstructive.

Operation for Ectopia Vesicae.

Makkas (Zentralbl, juer Chir.) holds that Maydl's operation, though much superior to older and now obsolete methods of dealing with extroversion of the bladder, does not prevent the trouble of incontinence and the risk of ascending infection of the ureters and kidneys. He describes a new operation originally devised by himself, which he has recently performed with encouraging results in a case of congenital ectopia in a girl aged fifteen years. The object of this procedure was to convert the caecum, after its exclusion from the intestinal canal, into a new urinary reservoir and, at the same time, to utilize the

appendix as an artificial urethra. In the first stage of this operation the caecum was "excluded" and its open ends securely closed by sutures; the continuity of the intestinal tract was re-established by lateral anastomosis, and, finally, the appendix which measured about three inches in length was cut through near its apex and attached at its open end to the lower part of the laparotomy wound. In the second stage, which followed after an interval of six weeks, the extroverted bladder was set free by dissection and the mobilized vesical flap to which the ureters remained attached was implanted into an opening made at the posterior portion of the lower pole of the new bladder formed by the caecum. The patient made a good recovery from the effects of this operative treatment, but the interval since the date of the second intervention is still too brief to permit any definite coclusions on the value of the author's method. Four weeks after the second operation the patient was in good health and quite free from fever; the reservoir formed by the caecum was capable of holding from 300 to 315 c. cm. of urine, but owing, it is thought, to some valvular obstruction in the appendix, could not be relieved without the use of the catheter, which was retained during the day and removed at night. The urine, the daily quantity of which amounted to over 1,000 c. cm., was free from albumen, was clouded by the presence of mucus found on close examination to be mixed with leucocytes and vesical epithelium.—Brit. Med. Journ.

Treatment of Diabetes Mellitus in the Child.

Marius Lauritzen states that early diagnosis is important in children because the late cases almost always go on to a fatal issue in spite of treatment. In families where there are cases of this disease or of other nutritive diseases it is advisable to make periodic tests of the urine for sugar. When acne, furuncles, or other skin diseases show themselves we should think of diabetes. The first thing to do in treatment is to find out the tolerance for carbohydrates by the use of such a diet as the following: 30 to 50 grams of rice cooked in milk, 25 grams of fish, 100 to 200 grams potatoes. 25 to 75 grams bread, varied with the age of the child. The urine for the twenty-four hours is then tested. If glycosuria increases we must put the patient on a strict diet. In mild cases the sugar disappears easily under diet alone, and here the prognosis is good. But in severe cases little effect is seen from diet, and the prognosis is very bad. Trauma has little to do with the etiology, and there are no evidences of disease of the pancreas in children. It is important to know that in many cases it is necessary to reduce the albumenoids as well as the carbohydrates to get rid of the sugar, since the albumins may be turned into sugar. The author varies the diet thus; a few days of strict diet, then a day of vegetables, then a few days of oat-meal diet, then a return to severe diet, and so on. In severe cases the use of fats and albumins brings on a condition of acidosis, and the alkaline condition of the blood is interfered with. To combat this the alkaline treatment is instituted. In mild cases no drugs are necessary.—Archives de Medecine des Enfants.

Fractures of the Femur in the Course of Ankylosis of the Knee.

E Kirmission calls attention to the production of a fracture of the lower end of the femur in the course of anchylosis of the knee joint and showed a patient having this complication. The cause is the lessening power of the quadriceps extensor which occurs with the akylosis. The biceps being the strongest of the flexors causes the leg to be held in a position of abduction and rotation outward, forming a solid lever. In movements, or after a fall, it is the bones that yield, instead of the ligaments. The ankylosis also causes trophic changes in the bones and they become abnormally fragile and break easily. The patient in question showed general joint disease following scarlet fever, which the child had at the age of five years, six years before he was seen by the author. Af the ankylosis was partially established a fall fractured the lower end of the femur in the manner described. The author has seen eleven similar cases.—Le Bulletin Medical.

Origin of the Ascites in Hepatic Cirrhosis.

Klopstock, who has been writing a serial article on hepatic cirrhosis, evidently does not regard ascites as a simple obstructive phenomenon. for it ts often absent when it ought to be in evidence. The old view of the preventive power of an augmented collateral circulation seems to be in doubt. There are two types of ordinary or, say, alcoholic, cirrhosis in which ascites is present or absent respectively. Obstruction is not the main factor, for stasis in the portal vein with attempts at compensatory circulation may be present or absent in either type. Believing that cirrhosis is a toxi-infectious disease, the author regards the presence or absence of peritoneal complications due to the original bacterial cause. The fluid of hepatic ascites, so-called, has rather a peritoneal cell count than one due

to simple stagnation. The author's views might be bourne out in part by the lesions found in the so-called Bamberger's disease, in which chronic peritonitis and hepatic lesions coexist, but he does not even allude to the latter affection by title. He does mention coincidental conditions in malaria, syphilis, Banti's disease, and miscellaneous unknown affections.

Contribution to the Study of Anaphylaxis.

Ugo Calcatura says that the factors necessary to cause anaphylaxis are a fir st dose of any infection or serum, a period of incubation sufficient to allow of hypersensitiveness being developed, and a second dose of the infection, which brings about the phenomena of anaphylaxis. The period of incubation is generally from ten to twelve days. Many disturbances referred to idiosyncrasy may have this as a cause. The intolerance of infants for cow's milk may be due to this phenomenon. Deaths from the use of sera may also be due to anaphylaxis. The author made experiments as to the effects of diphtheria antitoxin on the nervous system when injected into the spinal canal, with the view of reaching the nervous system more directly in cases of paralysis. In two such cases the injection caused symptoms of anaphylaxis to appear, while in several others none was produced. The author concludes that in cases of diphtheria we should exercise the greatest care in the use of second injections after some days have elapsed from the use of the first dose of serum.—Rivista di Clinica Pediatrica.

Treatment of Smallpox.

Suppuration in the pustules of smallpox will never be so intense if the patients are treated with red light. It is therefore customary in many hospitals of the Far East to place smallpox patients in wards, with windows of red glass. Dreyer praises this treatment but mentions as serious drawback the difficulty of ventilation when no artificial system has been installed. He therefore paints the affected skin three to four times with a concentrated solulion of potassium permanganate. The red and later dark-brown discolorotion will keep out the actinic rays while the disinfecting and deodorizing properties of the drug will materially diminish the horlible odor so common to smallpox hospitals. The severity of the disease is in no way diminished though the cosmetic results are much better. In cases with considerable heart-weakness, the drug should be used with caution, since the absorption of potassium may still further weaken the heart. It is possible that better results will here be obtained with the corresponding sodium salt. —Muench. med. Woch.

Autoserotherapy of Hydrocele.

Autoserotherapy in the treatment of effusions of serous fluid by injectons of the fluid itself into other parts of the body. Its employment has hitherto been confined to cases of pleural and abdominal collections of serous fluid. Berthelon, of Tunis, however reports two cases in which the method has used with benefit for the treatment of hydrocele. The first patient, a man of middle age, gouty and arterio-sclerotic, had suffered for three years from a large hydrocele. Two cubic centimetres of the fluid were removed from the tumor by a syringe and injected into the thigh, after the usual aseptic precautions had been taken. No reaction followed, though the patient continued to go about as usual. The following day there was a marked diminution in the hardness of the hydrocele, which had decreased in size by 15 millimetres. Two days later the decrease was uery marked. Two cubic centimetres more of the fluid were removed and injected into the muscles of the thigh. Three days later the scrotum on the side of the hydrocele had regained its normal size. There has been no relapse since then, though the operation took place over a month before the time of writing. In a second case, a younger patient than the former, the author collected 12 Cc. of the fluid from the hydrocele, of which he injected 2 Cc. into the thigh. The hydrocele rapidly disappeated, and by the fourth day the scrotum on the affected side was of normal volume.—The London Hospital.

Treatment of Sciatica.

At a meeting of the Societe Medicale des Hopitaux held on Oct. 14, M. Ramond, M. Deffins, and M. Pincon said that in the treatment of 65 cases of primary sciatica they used one or other of the following methods: injection of artificial serum or solution of magnesian salt in the vicinity of the nerve, epidural injection of air filtered through cotton wool, and siphonage. These were, in their opinion, the most active measures available for the purpose. The injection of air often gave excellent results in comparison with the effects produced by the other injections, and on account of its simplicity it deserved a good place on the list of therapeutic procedures. It was impossible to say which was the best form of treatment, because a case of sciatica which derived no benefit from injections in the vicinity of the nerve might improve or might even disappear entirely after injections of sterilized air or the epidural injections already mentioned. In the treatment of ob-

stinate sciatica it was therefore advisable to make successive trials of these various methods.—The London Medical Journal.

Veronal-Sodium Compared With Other Hypnotics.

Wendt has made some exact studies on the sedative effects of veronal-sodium as compared with those of methyl-sulfonal and sulfonal on a large number of mental cases with excitation and insomnia (dementia precox, paranoia, progressive paralysis). In general, veronal-sodium in doses of 0.5 to 1 Gm. was the most potent of the three. An especial advantage is its solubility, which induces rapid action, so that many patients asleep within twenty to thirty minutes. Sulfonal, though an equally potent somnifacient, never acts with such promptness, while methyl-sulfonal was always the least effective of the three. It is difficult to state indications, but usually sulfonal is to be preferred in the hallucinations of strong individuals, particularly in paranoia, while veronal sodium is better tolerated and more effective in individuals debilitated by long disease, such as paralysis and senile affections. In no case was the course of the disease in any way changed by the administration of these drugs, even when given in regular doses during the day. The patients never objected to taking veronal-sodium.—Therap. Monatshft.

Pruritus Vulvae During Pregnancy.

Rudaux finds that pruritus is a common trouble among pregnant women, and that it is often so aggravated as to entail loss of rest and sleep, and to induce pronounced nervous irritability. In some cases the cause is without doubt the presence of more or less well marked discharge, but he has found sugar in the urine of all the pregnant women who have complained of discomfort and irritation of this part. He permits no ingestion of sugar or swe ets and prescribes for them Vichy water as a drink. A local application of hot water, with 10 Gm. of chloral, is made four times a day, the parts being afterwards treated with an ointment of ichthyol 10 Gm. and benzoin. A few days later a powder made up of zinc oxide, bismuth, and talc will be found useful. If there is any leucorrhea a morning and evening douche containing 20 Gm. of sodium borate is prescribed.—British Med. Journal.

Topography of Pulmonary Localizations in Pneumonia of Children.

E Weill and G. Mouriquand have examined 240 cases of pneumonia in children with reference to the formation of a triangle of hepatization, and have been impressed with the frequency with which the pneumococcus attacks certain portions of the lungs. The most frequent localizations of consolidation are the left base and right apex. Out of the 240 cases 200 were distinctly localized ; of these 82 involved the left base; 64 the right apex; 32 the right base; 15 the left apex. Radioscopy shows with especial plainess the localization at the apices. Here develops a triangle of hepatization with its base in the axilla and apex at the hilum of the lung. It is quite superficial and cannot easily be recognized by the stethoscope. In 32 cases examined radioscopically it was demonstrated in 26.—Annales de Medecine et Chirurgie Infantiles.

Speaking of State society official organs brings us the case of the Ohio State Medical Journal. The editor is put to great straits in securing advertisements for his publication. In order to make a creditable business showing at the annual gathering, the young man, who is always tastefully arrayed, is forced to pay double price for personal necessities in the wardrobe line in order to secure advertisements, paying for same out of his own meagre salary. As the specialists of the State are the chief beneficiaries of the association, reading most the papers and thus taking the only and proper method of letting their skill be known to the general practitioners of the commonwealth, they have been asked to place their names and specialty in the advertising pages. No objection whatever is to be found with the scheme, but the entire proceedings are an amusing commentary on the straits to which the official organs are being put to justify their exisrence and pay the printer. And they sometimes fail, occasionally fail greviously, in admitting advertisements not sanctioned by the Council on Pharmacy and Chemistry of the American Medical Aesociation.—Lancet Clinic.

Treatment of Diabetes.

Forty or fifty years ago inhalations of oxygen were highly recommeaded for various diseases of metabolism, including diabetes mellitus. Oxygen may now be given internally, in the form of peroxides, which split off the gas readily in contact with living tissues and the gastric juice. One of the most potent preparations of this character is magnesium-perhydrol (15 and 25 per cent). The author, C. V. Sturmer, himself suffered from a severe form of diabetes and excreted 2- to 3-per-cent, sugar even when he dieted strictly. After taking 0.5 Gm. of the 25-per-cent. preparation three times a day the meteorism and oppressive

feeling in the chest disappeared, the amount of urine was reduced from 1800 to 1400 Cc , and the percentage of sugar from 1.6 per cent. to 0.2 per cent. The acid reaction of the urine soon became alkaline, which is of decided advantage when there is acidosis. He repeated the experiment twice with the same result, and did not diet while taking the preparation.—Muench. med. Woch.

Treatment of Scoliosis.

Hoffmann (Deut. med. Wochensce) says that the best results are obtained during the stage of development of scoliosis, the treatment in the main being educational. The child should be taught what to do to maintain the correct posture, and thus to correct the deformity. This is accomplished partly through verbal admonition, the child being told to throw out the chest, draw in the abdomen, draw back the head, etc., and partly by manipulations of the hands of the physician, so that the paiient assumes a correct, or, better still, an over corrected position. The parents should assist in this treatment. Next in importance are exercises for strengthening the abdominal muscles and for mobilizing the spine, such as bending the back forward, backward and laterally, and exercises for the arms and legs. In advanced cases the creeping exercises suggested by Klapp, with massage, elevating one side of the chair, or raising the heel, etc., are of advantage. This treatment, which must be carried out under the supervision of a physician, may last for months and even years in advanced cases. The corset is resorted to by the doctor in severe cases, in which it may prove of value by relieving pressure upon the heart and lungs, althnugh not for its action upon the deformity itself.

Suture of the Patella.

Baum (Duet Ztschrft. f. Chir.) thinks it advisable in all cases of patellar fracture to suture the fragments, which is done in the following manner: The joint is opened by a curved incision, and all coagula carefully removed, after which the fragments are sutured with silver or aluminum bronze wire and the torn ligaments with silk. With the wound still open, the knee is flexed at an angle of 135 degrees, the skin sutured, and a splint applied to maintain the knee in this position. This splint is removed on the sixth day and the angle of flexion increased, and this procedure continued from time to time. After the third or fourth day the limb is massaged, and after two weeks active motions begun in the recumbent position. The results of this method, which is characterized by its painlessness, have been very satisfactory, the patient's stay in the hospital being, on the average, forty-seven days as against sixty-four under former methods. Functional restoration was so comple that on leaving the hospital very little after-treatment was required. Even in the case of older fractures, the treatment although of longer duration, afforded excellent results.

Contribution to Brain Surgery.

Hildebrandt (Duet. Med. Wochensch), has performed about one hundred operations on the brain for the treatment of tumors and the tumor-like manifestations of serous meningitis, epilepsy, and cerebral abscess. Of the cases of malignant tumors only one could the Dr. consider as probably permanently cured; although no positive statement in this respect is warranted, as only two years have elapsed since the operation. From his experience the author concludes that a more favorable prognosis is permissible in the case of benign neoplasms of the brain when accessible, although these are much more rare. In view of the fact, however, that the nature of the growth can be only exceptionally determined, and it is frequently doubtful whether a tumor, cyst or serous meningitis is present, operation is indicated under these circumstances. Owing to the present development of cerebral surgery and its freedom from danger in many instances, it would be a serious sin of omission if an accessible tumor were not subjected to operation, the more so, since such patients frequently suffer from severe headaches, and the optic atrophy, if present, tends to constantly increase to complete blindness. To remove the results of the increased cerebral pressure due to the tumor, at least palliative trephining should be done, which may be followed by extirpation of the growth if its nature and character permit.

Treament of Ascites.

Paterson (Brit. Med. Journal) recommends drainage into the subcutaneous tissues of the abdomen. The Dr. uses drains or buttons consisting of a perforated glass cylinder expanded into a flange at each end. The operation is a simple one. An incision, about three inches long, is made in the middle line below the umbilicus, and the peritoneal cavity is opened in the line of the incision. If the abdomen has not been previously tapped the greater part of the ascitic fluid escapes at this stage. The omentum is now drawn down and removed at a level well above the point where the drain is to be placed, because, if left, it very soon passes into the opening in the drain and completely blocks it. The subcutaneous tissues are now dissected out-

wards, on one side, till the semilunar line is exposed, and through this an opening is made into the peritoneal cavity. This opening should just be large enough to permit the button being placed in position. The drain may be passed either from the peritoneal or subcutaneous side, but if from the latter, care must be taken to avoid stripping the peritoneum from the edge of the opening when inserting the tube, or the flange may come to lie between the peritoneum and the subperitoneal tissues. By slipping one flange edgeways through the opening there is no difficulty in placing the button in position. When a suitable size has been chosen one flange should lie flat on the peritoneum and one on the abdominal aponeurosis, without any pressure being exercised on the intervening tissues. If too long, the apparatus would project into the peritoneal cavity, and the intestines might get nipped between the flange and abdominal wall; while if too short, the button would tend to cut its way through the thickness of the tissues in its grasp. If the opening for the opening for the drain has been made too large and the edges do not grip the button firmly, a purse string suture should be placed close to the button on the aponeurotic side, so that when tightened the soft tissues are brought into close contact with the groove in the drain. The subcutaneous tissues are next closely stitched by a continuous suture to the anterior layer of the sheath of the rectus. This suture is placed about one inch from the margin of the primary incision and parallel with it. By this means the superficial end of the drain is shut off in a compartment of its own, and the fluid, as it escapes from the peritoneal cavity, is prevented from throwing too much strain on the suture closing the skin incision. The primary wound is sutured in the usual manner, the skin being closely stitched by a buttonhole suture to prevent any leakage. A collodion dressing applied to the wound gives additional support. This dressing is reapplied as often as required till the skin wound is firmly healed.

Thermo Penetration.

Eitner (Wiener Klinische Wochenschrift) says that if proper care is used, the method is devoid of danger.

Many of the apparatus now on the market are of improper construction and deficient in quality of current. If the sparking is not perfectly regular, the condenser becomes heated and useless. The Dr. prefers the Poulson lamp. This is an arc lamp which burns in hydrogen gas. If the sparking is not perfectly regular, undamped oscillations occur which produce muscular contractions. In treating joints he uses a large indifferent electrode at some distance and a smaller electrode over the joint. The duration treatment is from 15 to 45 minutes.

Twenty-one cases of gonorrheal arthritis were treated, eight of these were acute cases, six were cured by thermo-penetration of the involved joints, and genitals in a very few days, without other treatment. Two interrupted the treatment. All the acute cases were relieved quickly of pain. Very favorable results were shown in the chronic cases. Eleven cases of rheumatic arthritis were treated. Two cases of acute involvement of the wrist and hand were cured in a few days with thermo penetration alone. Five cases received salicylic acid preparations in addition from the physicians referring them. One case of chronic polyarthritis of knee, elbow, hand and several finger joints was so much improved by two months, treatment, that motion was fully restored. In two very old cases the result was not good. Two cases of gout with painful tophi were permanently improved. One case of neuralgia of the ulnar nerve was cured. One case of sciatica and one case of neuralgia of the trigeminus were treated without any result. One case of chronic bronchitis was materially improved. All cases of acute gonorrhea have been treated during the last one-half years, with thermo-penetration only during the first few days with the results of rapid ameliaration of the burning and pain. The writer warms the pendulous portion between two electrodes. After the sensitiveness of the mucous membrane has subsided medicamental treatment is added. The introduction of metallic electrodes in the urethra is condemned, because it is possible to damage on account of imperfect distribution of current. The uses, however, a syringe of peculiar construction. With this he fills the urethra with a one per cent. solution of nitrate of silver, the syringe is held by the patient and serves as one electrode. The other electrode is placed over the skin of the penis. The parts are warmed to about 40° to 42° C. for one half hour. Prostatic involvement is seldom treated by the writer with thermo penetration. Care should be exercised to use only undamped oscillations because if muscular contractions occur when using this method, pus is readily carried to healthy parts.

Twenty-nine cases of epididymitis were cured. Naevi, angioma papilloma, fibroma, and warts have been removed by utilizing the cauterant action. Epilation can be done with good cosmetic result. Well

insulated fine needles are introduced in or near the hair bulb attached to the current, the other electrode being held with the hand. A very small amount of current suffices. One second's contact is enough. Cases of psoriasis, chronic eczema and one case of lichen ruber planus have yielded favorable results.

Autochthonous Amoebic Dysentery.

Gavin (Sem. med.) details one of the rare cases of amoebic dysentery of temperate climates. The patient was a women of 40, and neither she nor any of her family had ever been abroad. There was nothing of note in her family history, although she had suffered from enteric fever a good many years ago. She entered hospital suffering from abdominal pains and diarrhoea. This state of affairs had lasted for about nine years, the motions being bloodstained and glairy, more frequently at night or after food. The motion was urgent and accompanied as a rule by sacral pain and violent abdominal pain. The abdomen was distended. She suffered from headache, slept badly, had cold feet, and was losing weight. On examination, the caecum and ascending colon were found to be tender on palpation. Her breath was fetid, and the tongue was coated. The other organs were normal. Microscopic examination of the fresh faeces showed numerous amoebae in a very active state. Lavements containing 2 grams of ipecacuanha were administered for some days, but without any appreciable effect on the condition, and finally 2 grams of quinine sulphate were given daily with a lavement containing tannin, and this had a marked effect in diminishing the number of stools to two or three per diem, although amoebae were still found in the fresh faeces. The author then describes the characteristics of the amoebae found in his patient. He believes it has not been noted before, and that it is totally distinct from Amoeba histolytica and Amoeba tetragena. He goes on to say that inoculation of a young cat with the faeces of the patient per rectum resulted in all the symptoms of acute dysentery in about nine days. Further inoculations of other cats with the excreta of each had the same result, death in each case resulting in about twenty-four days. The post-mortem evidence was not very distinctive, and consisted of a sanguineous, adherent exudate, and a series of small ulcers varying in size up to a lentil, chiefly in the large intestines. The author concludes by saying that it is a chronic form of dysentery, but unlike the dysentery of hot countries, and produces no complications such as abscess of the liver.—Beitish Medical Journal.

Miscellaneous.

Functions of the Thymus.

E. Weill presents a study of the functions of the thymus in which he shows that it is not an exclusively lymphoid organ, and that in all its history, physiological and pathological, it presents differences from the lymphoid glands which include the role of the epithelial elements. It arises from an invagination of the layers of the entoderm at the level of the third brachial cleft. From the beginning of the fourth month of intrauterine life until the fourth year of life its function is active; then atrophy takes place. At birth it is in great part a lymphoid organ with a distinct covering and a central reticulum filled with leucocytes. Its structure resembles that of the bone marrow. There is a true balance between the development of the lymphoid and the epithelial elements. Injection of the thymus extract causes fall of blood pressure, as does that of the lymphatic glands. But it differs widely from them in its chemical composition. Removal of the thymus in young animals causes at first obesity and a state of edema, later cachexia and atrophy. Its effect is only temporary, showing that its function can be taken up by other organs, such as the genital organs, hypophysis, spleen, suprarenals and thyroid.—Lyon Medical.

Intravenous Injection of Corrosive Sublimate in Puerperal Infection.

S. Polizzotti (Annili di ostetricia e ginecologia, ann. xxxii. vol. ii. pp. 445-486, 1910) sketches the history of the use of intravenous injections of corrosive sublimate in cases of puerperal fever from the year 1893, when the practice was introduced by Baccelli, up to the present time. The good results obtained by D'Erchia had not always followed in the hands of other observers, and some obstetricians had feared that evil effects would ensue in the kidneys. The writer records four cases in which this plan of treatment was carried out and in all of which recovery followed; careful bacteriological researches were carried through. The good effect was regarded by Polizzotti as due to three kinds of action; in the first place the opsonic index was raised, the opsonising substance producing such changes in the bacterin as rendered them phagocytable and less resistant; in the second place leucocytosis was stimulated; and in the third the corrosive sublimate acted in an antitoxic way. The small number of cases however, prevented the author from stating his belief in more confident terms.—Edenburgh Medical Journal.

The Physicotherapy of Sciatica.

Orb favors the application of dry cupping glasses which the patients themselves can use, so that the application may be frequently repeated. He has seen good results in acute cases from wet packs on the hip and leg made with linen or silk bandages, wrung out in water of 60 to 70 degrees and covered with a double layer of flannel. Orb does not employ massage in the acute cases and the hard pressure often employed by masseurs may considerably increase the pains. But very light friction carefully applied by the physician himself, avoiding the most painful spots, is sometimes very useful.

Electrotherapy he does not use very often; when he uses it he gives the galvanic current in acute and chronic cases. using two electrodes, each 10 square inches in area, the negative on the abdomen, the positive on the posterior iliac spine or the sciatic notch, moving both evenly along the leg without interruption of the current.

While the application of physical methods of treatment is limited in the acutest cases of sciatica. it has ample scope, he says, in the subacute and chronic cases. In these cases massage is used most frequently. It is necessary to employ very light massage at the beginning of a course of treatment in order to avoid unnecessary and undesirable pains.—Orb in Medical Press and Circular.

The Treatment of Cancer.

F. Durante goes over all the methods for the treatment of cancer without surgical operation that have been advocated in modern times, and finds them all wanting as far as a radical and permanent cure are concerned. Among the methods of treatment that are considered are the biochemical methods, the use of erysipelas germs to combat the cancer tissues, as proposed by Coley, cancer vaccines, serotherapy, the x-rays, radium, and fulgyration. Not one of these agencies which have at first pomised such good results has stood the test of time. The growths have gone on developing after being retarded in some instances for a time, or recurrences and metastases have taken place. Those cases that have seemed to be permanently cured he refers to incorrect diagnosis. The superficial epitheliomata are easily influenced by several of these remedies, but the deep carcinomata are unconquerable by any of them. He denies the selective action of rays and fulguration on cancer cells, while he admits that physical methods act as a strong stimulus on cellular reproduction, disorganization of protoplasm, and molecular degeneration, when they did not produce an eschar.—Il Policlinico.

The Painful Retro-manibular Point as an Early and Constant Symptem of Meningitis.

Signorelli (Revista Critica di Clin. Med.) mentions the "retro-mandibular point." This he says is the spot situated under the lobe of the ear, between the maxillary articulation and the mastoid process. In healthy individuals, this spot is slightly sensitive on pressure. It was established by the author that a meningeal irritation is invariably present, when pressure at this point gives rise to pain. This painfulness was demonstrated by him in every case of meningitis; it belongs to the earliest symptoms of the disease, and is already present at a time prior to the onset of rigidity at the nap of the neck, or of Kernig's Symptom. This new symptom acquires the greatest diagnostive importance in ihe beginning of a severe afebrile disease, with loss of consciousness and delirium, when the diagnosis lies between miningitis, typhoid fever, malaria, or septicemia. Meningitis may be positively assumed to exist in case the patient reacts to pressure on the retro mandibular point, by defensive movement or twitching of the facial muscles. The Dr. was enabled to demonstrate the presence of this symptom in about one hundred cases of meningitis of variable origin, including tuberculous meningitis.

Malaria and Agriculture.

A valuable lesson to be drawn from Dr. Spencer's article in the February issue of the Transvaal Medical Journal lies in the illustration it affords of the fact that the term cultivation of the soil must be interpreted in sense of scientific agriculture if cultivation is to be acknowledged as an eradicator of the Anopheline.

It has been abundantly proved in other countries that malaria disappears before the advance of scientific agriculture. Dr. Spencer shows that "cultivation" as practised in the districts with which he is familiar, results in the increase of malaria. It is therefore justifiable to conclude that the methods of cultivation employed in those districts are crude and unscientific.

A principle of scientific cultivation is the preservation of subsoil moisture by the prevention of surface evaporation. The method necessitates the regular use of the cultivator or acme-harrow after rain or irrigation so that the land is left covered with a thick and even mulch of loose soil.

Dr. Spencer speaks of holes and irregulasities present in "cultivated" soil. There are no such breeding places for Anopheles

in land which has been cultivated scientifically; the beautifully even mulch abolishes them. If the agriculture of the districts referred to were conducted on scientific lines, it would not have been possible for Dr. Spencer to trace so ably a distinct connection between the incidence of malaria and the vicinity of "cultivated" land.

A second lesson is made evident by these facts. With the extension of maize and fruit growing it is possible that irrigation will be introduced into those dry districts where malaria has not prevailed, solely owing to the lack of breeding-places for Anopheles. Beginners in the practice of irrigation—I speak out of past experience—are apt to forget that such crops as maize and fruit under irrigation require also adequate drainage. Stagnant pools and even a water logged soil may eventually be caused by irrigation when proper cultivation is not carried out or when drainage is not provided; especially if, as is frequently the case, the irrigation shows trop de zele on the part of the farmer. Thus the Anopheles may conceivably be introduced into new districts in the wake of extended agriculture. Where the nature of the crop—as in the case of sugar-cane—requires the permanent presence of flumes, trenches, and canals, efficient anti-malaria measures are necessary, such as attention to the construction of the canals, careful removal of weeds, frequent flushing, and stocking with fish which consume the lavae pupae and eggs of Anopheles.

The conclusion may be suggested that education in the suitable methods of malaria prevention should go hand in hand with education in scientific agriculrure in this country.—The Calcutta Indian Public Health Journal.

Involution of Ovarian Tumor.

Fraenkel (Monats. f. Geb. u. Gyn.) discusses a pathological phenomenon already observed and reported by three other writers. He was consulted about a woman, aged 25, for slight haemorrhage in the second month of pregnancy. Three weeks later, hyperemesis set in, and the uterus had increased in size with unusual rapidity. There was, on the other hand, no indication of any pelvic or abdominal tumor. Within a week the uterus reached first to the umbilical level, then to the ribs, and there was high temperature with dyspnoea. The os was dilated and a vesicular mole removed; under the microscope, the intravillous spaces were seen to be packed with chorion-epithelial growth. A pedunculated tumor, as big as a goose's egg, could clearly be defined on the right of the uterus, and a larger tumor was also detected to its left. Within a fortnight after the delivery of the mole, some acute attacks of abdominal pain, and later on, dyspnoea and haematemesis developed. Torsion of the pedicle of one of the tumors or some other familiar complication causing peritonitis was suspected, but the probability of chorion-epithelioma of the uterus with metastases in the lungs was not overlooked. The patient was in a very bad condition of health, and Fraenkel, in consultation with Kustner, agreed that if the lungs were really invaded operation would be too late, whilst. if there were no chorion-epithelioma and the tumors were common ovarian cysts, there would be but small risk in waiting till the patient's health had improved. About a week later the tumors were still easily defined, yet appreciably smaller. Four weeks afterwards they could hardly be made out by palpatatioa, which, however, caused straining; but two months later, when the patient had returned from an inland watering place, the parts were no longer tender, and not only had the tumors entirely disappeared, but there was no difficulty in making out the ovaries, which felt perfectly normal and free from any neoplastic or inflammatory change. Tesicular mole has been repeatedly reported in association with ovarian tumor. Albert noted complete disappearance of a pair of small cysts two months after the expulsion of a mole of this class. Gouilloud watched closely a similar case; the ovarian tumors were as big as a fetal head and perfectly movable. Phlebitis and embolic complications followed the expulsion of the mole. The tumors underwent involution synchronously with the uterus, and at the end of three months nothing more than slight enlargement of the ovaries could be defined. Two years after the molar pregnancy the patient aborted at the fourth month, but the fetus and placenta showed no signs of degeneration. Kroemer observed the complete involution of small ovarian cysts after the delivery of a vesicular mole in two cases.—British Medical Journal.

At the instance of tho editor of the Texas Medical Journal there is now on the calendar of both houses of the legislature a bill aiming "to prevent the procreation of lunatics, epileptics, imbeciles and other forms of degeneracy by the inmates of the several State asylumns." Texas, in line with other States, is becoming more and more aware of the rapidity with which degeneracy is increasing; and, with a view to prevent it as much as possible, it is designed to sterilize those known to contribute the greatest number to the list and de-

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The obstinate coughs of Winter colds too often point to systemic weakness. To control and overcome them it is essential to raise the vitality and nutrition of the whole organism. It is its capacity in this direction that gives

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generates. The framer of the bill states that in consequence of the crowded condition of the insane asylums many of the inmates have been given indefinite furloughs and in order to render these harmless, and in the interest of race integrity, "a trifling operation which neither mutilates nor unsexes a person" should be performed. The first section of the act authorizes the superintendent of each insane asylum to appoint for each institution two skilled surgeons, who in conjunction with the physician or surgeon in charge, shall constitute a board, who shall examine the physical and mental condition of persons by whom procreation would be advisable. The family history as far as it can be ascertained, shall also be carefully examined ere passing on the case. Upon the doard finding that there is no probability of such person being improved to such an extent as to render procreation by him advisable, then it shall appoint one of its members to perform the operation of vasectomy, prior to furlough or discherge. For such operation the surgeon shall receive the munificent sum of three dollars from the State, as compensation. The law is in operation in Indiana, and it is believed has already justified its enactment. The journal is heartily in favor of such a law, and regrets that the crowded condition of the calendar of the Texas legislature seems to preclude its enactment at this session. The entire profession of the State should demand the passage of the law. It truly is in the interest of race integrity.—Lancet Clinic.

Indicanuria: Its Diagnostic Significance.

Of all the office-laboratory tests that the physician is called upon to make, none is of more importance than that employed to detect the presence of indican in the urine. When present in any considerable proportion, this substance is definitely indicative of undue intestinal putrefaction of proteids and constitutes positive evidence of the constitutional absorption of the toxic products of such putrefaction. The symptoms arising from the existence of such an auto-toxemia are veritably pretean in character and upon the extent and duration of this self-poisoning, depends the degree of injury suffered by the organism.

The early detection of a pronounced indicanuria is of great importance to both patient and physician, as it affords the latter a key to efficient treatment, designed to check the putrefactive changes in the bowel and thus prevent the formation and absorption of the toxic products and the consequent ixtoxication therefrom. Tablogestin (Tablets of Chologestin) causes the disappearance of urinary indican by relieving the functional errors causative of same, i. e., Hepatic Insufficiency and Biliary Stasis combined with proteolytic inactivity of the digestive jnices and undue putrefactive changes in the bowel. Tablogestin exercises cholagogue, digestive, antiseptic and natural laxative properties. A consideration of the formula will convince any physician that the preparation is carefully designed to meet these special indicattons for treatment and a clinical trial will demonstrate that the remedy does just what it is intended to do.

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Tedious Convalescence.

The tediousness of convalescence of la grippe and pneumonia shows with what force the disease has attacked the tissues of the body and to what low ebb it has brought the vital powers. If convalescence is to be shortened and the ability of the body to resist tuberculous processes is to be added to, resort must be had to such agents as will feed the tissues and make blood. For this purpose Cord. Ext. Ol. Morrhuae Comp. (Hagee) holds high favor with the profession.

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strange when we remember that nothing ing could keep up this irritation more than constant coughing. In the more severe cases of bronchitis and in phthisis, the patient is not only made more comfortable, but the disease itself is brought more directly under control by checking the excessive coughing, relieving the pain and bringing the temperatuse down to the normal standard.

Pregnancy in the Blazek Sisters.

Dr. F. Mirto (Annali di ostetricia e ginecologia, ann. xxxii. pp. 374-387, 1910) comments upon certain phenomena in the labour by which the pygopagous twins (Rosa Giuseppa Blazek) gave birth to a child. These twin sisters were united by the sacral and iliac bones in such a fashion that the two vetral columns formed a V. The two pelves had nearly the same measurements, and the mammary glands were normally developed. The genito urinary organs opened in a common triangular space which was separated from the single anal orifice by the perineum. The coccyx could be felt to be single. The external

genital organs had a triangular shape. There was a single clitoris and a single urethral orifice in a common vestibule; but although the vulva was single there were two separate vaginal canals. From physiological signs it was evident that the rectum was single for a considerable distance up, and that there were two bladders. The pregnancy of one of the sisters terminated in a natural labour, and during the puerperium there was milk in the mammary glands of both sisters, in fact the secretion was more marked in the one who had not been pregnant. During the pregnancy the non-pregnant sister continued to menstruate and her general nutrition was unaffected, while the pregnant sister lost flesh. The interesting phenomena in parabiosis (as the peculiar semi-common life of a pygopagus may be called) throw some light upon the causes of mammary activity in pregnancy and seem to show that they differ from the causes underlying the general nutrition of the body as a whole.—Edinburgh Medical Journal.

On Subcutaneous and Intravenous Feeding with Grape Sugar by Kausch's Method

Berendes (Zentralbl. f. Chirurg. No 37, 1910) states that it has been the practice in Kausch's clinique for some time to add grape sugar to infusions of saline solution in cases in which patients have been unable to take nourishment by the mouth. The solution has been given subcutaneousls or intravenously, and over forty cases have been so treated The sugar is mixed with normal saline solution in the strength of 5 to 7.5 per cent. When given subcutaneously it causes no more pain than an infusion of saline alone, though its absorption is rather slower. Intravenous injections do not cause pain, but patients sometimes complain of a feeling of warmth and general discomfort during the injection. When the amount injected does not exceed 50 grms., i. e. 1 litre of a 5 per cent. solution, sugar does not appear in the urine unless the injection is repeated on several successive days, and even then only a very small amount is excreted, approximately 5 per cent. of the whole amount injected. The method apparently offers a safe means of supplying 200 to 300 calories daily to patients unable to take nourishment by the mouth.—Edenburgh Medical Journal,

Practical Points in the Treatment of Obstruction Associated with Peritonitis

Kappis, writing trom the clinique of Professor Anschutz, Kiel (Munch. med. Wochenschr., No. 1, 1911), describes a method of continuous oiphonage of stomach contents which has proved of great value in relieving patients suffering from obstruction associated with peritonitis. The method consists in passing a small stomach tube about the size of a No. 15 Jaques catheter through the nose into the stomach and attaching a siphon apparatus to the tube, which is fixed in position by any convenient menns. The stomach contents are in this way easily and constantly removed, vomiting and eructation cease, and patients become much more comfortable. In addition, patients can drink freely with the tube in position, and although most of the fluid is quickly siphoned off, their distressing thirst is much relieved. The tube may be left in situ for about twelve hours; longer stay may cause soreness in the œsophagus, but if necessary the tube may be replaced after an intermal without harm. The method has proved af great value in dealing with cases of acute dilatation of the stomach as well as in obstruction.

Kappis mentions also a convenient plan for controlling the flow from ehterostomy ypenings which consists in introducing the horizontal limb of a T-tube into the bowel through the fistula and clamping the vertilimb. The tube is easily made from two pieces of rubber drainage tubing of the same bore as the fistulous opening, and when introduced conducts the intestinal contents past the fistula, and effectually prevents free leakage. If necessary a certain amount of leakage may be allowed by putting an adjustable clamp on the vertical limb. Kappis cites cases in which these measures were instrumental in saving life. —Edenburgh Medical Journal.

Antihemolytic Action of Arsenic.

Gunn and Feltham, from a series of experiments, draw the conclusion that arsenic, whether in the form of sodium arsenite or sodium arsenate, exerts on the red blood corpuscles an action antagonistic to that of certain hemolytic agents. In a previous paper it was pointed out that very dilute solutions of arsenious acid exert on the red blood corpuscles in vitro a distinct protective action against hemolysis by hypotonic saline solutions. In the later experiments, however hemolytic agents of diverse nature were employed—namely, distilled water, cyclamin, and sodium glycocholate. The experiments, therefore, afford additional proof in favor of the view that a protective action on the formed red blood corpuscles against normal or abnormal hemolytic processes may, in part at least, account for the as yet imperfectly explained benefit which results from the medicinal administration of arsenic in blood diseases.—British Med. Jour.

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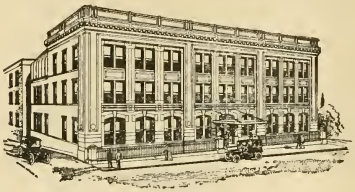
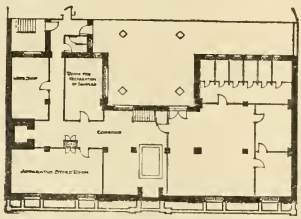


The New Lilly Science Building.

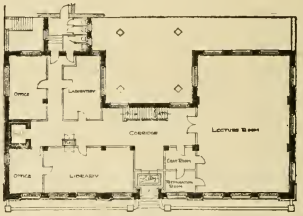
For a number of years the scientific departs of Eli Lilly & Company have made such rapid growth that the need of larger quarters became imperative. Nearly two years ago preliminary plans were drawn for a special scientific building and after many changes final plans were agreed upon late last summer Work began upon the new building in September and has progressed with little interruption through the winter. The contractor expects to have the building ready for occupancy by June 1st. In architecture, arrangements and equipment the structure will be one of the best of its kind. The outside walls are of red, hydraulic-pressed brick with white terra cotta trimmings. The interior walls and floors are of re-enforced concrete, rendering the building fire proof.



BASEMENT.

The basement will be used largely as a store room to supply the various departments with material for tests and experiments; a dumb waiter connects it with the other floors. In one corner is a shop equipped with machinery and tools for repairing and manufacturing delicate apparatus employed in the scientific laboraties. The basement also houses a still for the preparation of distilled water for chemical and research work and a special milling equipment for grinding crude drug samples for chemical and physiological tests.

The first floor has a handsome street entrance protected by a large glass canopy extending over the sidewalk. Across the north end of this floor is a lecture room capable of seating 200 comfortably. It is here that Lilly salesmen and department heads will assemble to witness demonstrations and hear lectures upon subjects related to manufacture and sales work. The rostrum is provided with an experiment table which is supplied with compressed air, water, steam, gas and electricity. A ventilating hood with exhaust will remove all noxious fumes. This lecture room is available to local scientific societies and for entertaining visiting classes from medical, pharmaceutical and other technical school. Adjoining the assembly room is a small preparation room and storage for apparatus. One of the most interesting equipments of the lecture room is a modern projection apparatus adapted to regular lantern slides, microscope slides and opaque



FIRST FLOOR

objects. Along the front of the building, south of the main entrance, as shown in the plan above, is a well-lighted, roomy library which will contain many thousands of volumes of scientific and technical works with ample desks and other accommodations for the staff. The library is in charge of a professional librarian who is also a pharmacist. Adjoining the library is the office of the director of the scientific departments. Across the corridor from the library are the office and laboratory of the head of the pharmaceutical development work.

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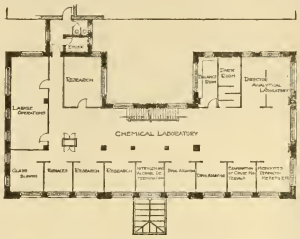
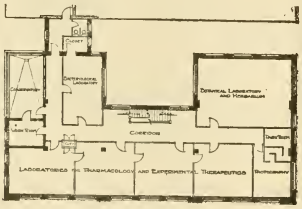


SECOND FLOOR

The second floor is occupied entirely by chemical laboratories for research and routine work. Some of the features of this floor are a dark room for spectroscope, polariscope and other instuments of this class; a balance room with balances mounted on heavy stone shelves projecting from the masonry of the wall. Along the front of the second floor are nine alcoves, each a complete chemical laboratory itself and large enough to accommodate two chemists. In one corner of the room is a fireproof room for ether and other inflammable liquids used in research work. There are also rooms specially designed for research, for large operations, and commodious quarters for the director of the analytical laboratory.



THIRD FLOOR.

The third floor accommodates several departments; the botanical laboratory, with its large general herbarium of mounted plants and an immense collection of crude drugs in glass jars, is in the northwest section; connected with it by corridor and in the southwest corner of the floor is a conservatory of the latest type with work room attached. This equipment enables the botanical department to conduct a number of experiments with plants throughout the year, supplementary to the drug culture experiments which the department is carrying on in a larger way in the field near Indianapolis and in other parts of the country where climate is adapted to the species under investigation. On this floor there is also a bacteriological laboratory and a photographic operating room with a dark room. The remainder of the floor is occupied by the departments of pharmacology and experimental medicine.

In the attic there is installed a large exhaust fan for ventilating the building, drawing fumes and gases from the different laboratories. The remainder of the attic is devoted to supplies for pharmacological experiments.

By June 1st or soon after Eli Lilly & Company hope to be able to throw the new science building open to visitors and will welcome pharmacists and physicians to inspect it as it represents one of the best equipments of its class and is a fine illustration of the intimate connection of science and modern pharmaceutical manufacturing.

The Absorption of Milk Casein from the Skin and Subcutaneous Tissue.

Roesler (Wien. Med. Woch.) has experimented with cutaneous and subcutaneous applications of proteids, which are sometimes not well taken by mouth although they are readily absorbed by the mucous membrane. The Dr. used for his experiments the preparation known as sanatogen. He prepared one-half Gram of sanatogen with water, and for another experiment with vaseline, both cold, in such a manner that a fairly consistent paste resulted. These were were spread upon muslin which had been weighed, then the entire poultice was weighed in order to ascertain any possible resulting loss. Then the watery mixture was placed on the right and the vaseline mixture on the left arm of the experimental person, who was young. The arms had been washed with soap and warm water and shaved and cleaned with alcohol and ether. After six hours both compresses

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were removed, when it was found that of the watery mixture 46 percent had been lost and of the vaseline mixture 20 percent, this much, therefore, having been absorbed by the skin. On examination of the residue, it was found that of the casein in the watery mixture 18.4 percent and of the vaseline mixture 21.2 percent had been absorbed.

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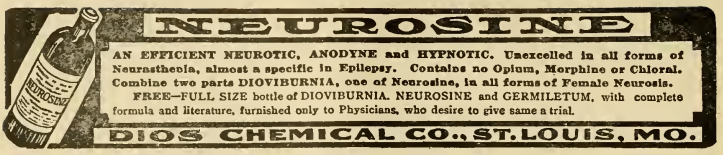
He says that it would be also interesting to treat neuralgia with sterilized sanatogen solution, and likewise atrophy due to inactivity or prolonged immobilization, which which would be treated either by means of massage or by injections, or by both methods. Finally, the method might be of use cosmetically, and the author says that a 10-percent sanatogen mixture has rendered him good service in his own case when his hands were chapped.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A Case of Ouarian Pregnancy with Diffuse Intraperitoneal Haemorrhoge.

Lea (Jour. of Obst. and Gyn. of Brit. Emp.) points out Spiegelberg's three essentials for the the establisbment of its diagnosis, viz., (1) the Fallopian tube of the affected side must be normal as shown by microscopic sections throughout its entire length, (2) the fœtal sac must be in the position of the ovary or connected to the uterus by the ovarian ligament, (3) the microscopic demonstration of ovarian tissue in various parts of the cyst wall. The case reported is an example of early ovarian gestation causing symptoms of diffuse intraperitoneal hæmorrhage. A married woman, œt. 29, had always enjoyed good health until suddenly seized with severe abdominal pain, vomiting and faintness. Three hours later she was visited by her medical attendant, who found her gravely anæmic, with small rapid pulse. Shortly afterwards Lea saw her and found her extremely pallid, pulse barely perceptible, exceeding 130 per minute. Menstruation had occurred three weeks previously and quite normal and there was no hæmorrhage from the uterus. The abdomen was somewhat distedded, especially below the umbilicus, and very sensitive to touch, especially below the umbilicus, and very sensitive to touch, especially in the left iliac region. Fluid in the abdomen was suggested by relative dullness in the flanks, with an obscure thrill. An indistinct fullness with slight resistance was palpable in the pouch of Douglas, but no obvious swelling of either appendage was definable. As hæmorrhage was evidently continuing it was decided to operate at once. On opening the abdomen a large quantity of blood with many clots was found free in the peritoneal cavity. Palpation of the course of each Fallopian tube revealed no obvious swelling. The left ovary was enlarged and from the surface projected a thin walled blood cyst. which had obviously ruptured and collapsed. The left appendage was removed after ligature. Blood and clots were removed and the abdomen closed without drainage. The operation was well borne, although the pulse was almost imperceptible throughout. Forty ounces of normal saline solution were transfused into the median basilic vein. Recovery ensued without any complication. The menstrual period commenced four d ,ys later. continued for three days of the usual type and painless. There was no evidence of a decidua at any time during the illness. The pathological examination showed the left Fallopian tube was perfectly normal in appearance, the abdominal ostium being patent and the fimbriæ healthy. The ovary somewhat enlarged, had been distended at its lower pole by a blood cyst which had ruptured and was partially destroyed during removal. Sections of the blood clot revealed a fragment in which chorionic villi were demonstrable to the naked eye and microscopically. Sections of the Fallopian tube showed the mucous membrane healthy through its entire length and no evidence of gestation, or the formation of decidual tissue. Section of the ovary through the base of the ruptured sac showed dilatation of blood vessels, areas of hæmorrhage in the stroma with numerous Graafian follicles. Sections taken from the various por-,ions of the cyst wall shhowed ehe presence of ovarian tissues and follicles. No villi and no evidence of decidual cells or syncitium were detected in the ovarian stroma. The pregnancy is regarded as having occurred in a Graatian follicle lying just beneath the surface of the ovary. As a result of rapid growth the ovarian tissue became thinned out, forming a cyst capsule, rupture being followed by hæmoperitoneum. The author points out that the symptoms of ovarian pregnancy are indistinguishable from those of tubal gestation. As a rule there is a history of a definite period of amenorrhœa, followed by pelvic pain, but occasionally the gestation may rupture in the early weeks without any menstrual disturbance, as in the case cited. In the majority of cases operated upon a large amount of blood has been found in the abdomen, as the ovarian vessels are large and bleed freely. In those forms of ovarian pregnancy which have continued to develope until the later months much difficulty may be experiencek in determining the primary gestation site. Early destruction of the pregnancy with or without sac rupture is the usual termination, although the fœtal

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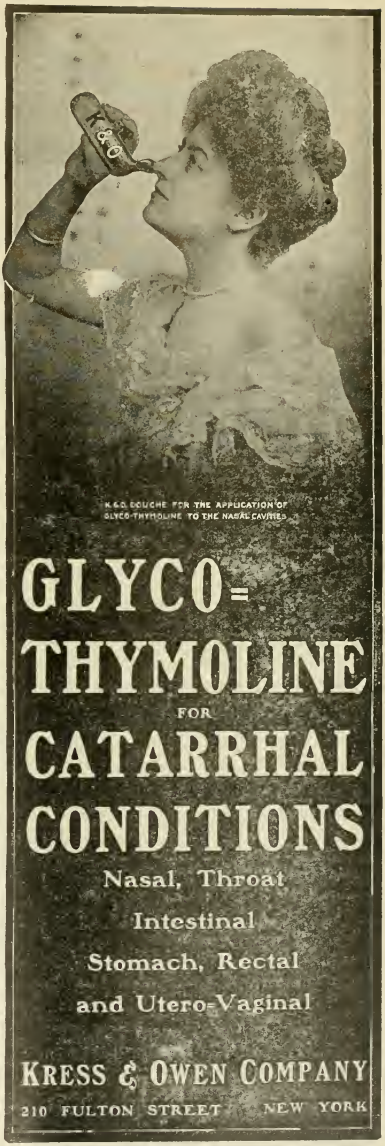

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sac may continue up to the third or fourth month of gestation. The pregnancy may be indicated by a hæmatoma, which may not contain an amniotic cavity, and its true nature can only be proved by the discovery of chorionic villi. Rupture of a blood-cyst situated in the ovary, or hæmorrhage from a Graafian follicle or a corpus luteum is an occasional cause of intraperitoneal bleeding. The author cites cases of this kind, as described by Jayle, Dockyer, Blacker and Giles. in which severe bleeding may occur in the absence of pregnancy. He adds, however, the probability that some of these cases may have been the result of a ruptured gestation sac in the first stage, and advocates the only reliable diagnostic test; a careful search for fœtal structures in the ovarian tissue and all the blood clots. A complete bibliography is appended and the paper is illustrated by three excellent coloured plates showing the structures removed at operation, and the microscopic appearances of chorionic villi in the blood blood clot, and of ovarian tissue in the blood-cyst.

The Virginia Semi-Monthly.

In the issue of this Journal for December 9th, 1910, the editor stated editorially, that certain changes were contemplated, even before the death of the late editor, Dr. Landon B. Edwards. The editor now is perfecting his plans, and he will beginning with the April issue, announce an Editorial Staff composed of representative physicians from various sections of Virginia as well as a represetative from the District of Columbia, and one from North Carolina.

The editor adds :

"While this journal enjoys a liberal patronage from all of the Southern States, and a general circulation throughout the Union—with copies going to many foreign countries—it would be impracticable and not conducive of the best results to make the Staff too large or to have its members very widely scattered. It has, therefore, been our aim to associate with us men of ability and special fitness from the sections in which our activities are proportionately greatest.

With the exception of the Managing Editor, who will continue to exercise exclusively control over all financial and other business matters, the Editorial Staff will have no business connections whatever with the Semi-Monthly.

Our next issue will contain a further Statement of our plans and purposes, looking to the enlarged usefulness of the journal."

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Experimental Fat Embolism.

Fuchsig found that the intravenous or intraarterial injection of oil has an effect dependent upon the mass of oil and the rapidity with which it is injected. The oil ean traverse many capillaries provided that the pressure with which it enters them is capable of overcoming the frictional resistance. Death follows the injection only of large quantities of oil. Death may be of pulmonary, cerebral, or cardiac origin, but always as the result of embolic occlusion of the blood-vessels. The pulmonary form is the most common.—Zeitschrift fur experimentelle Pathologie und Therapie.

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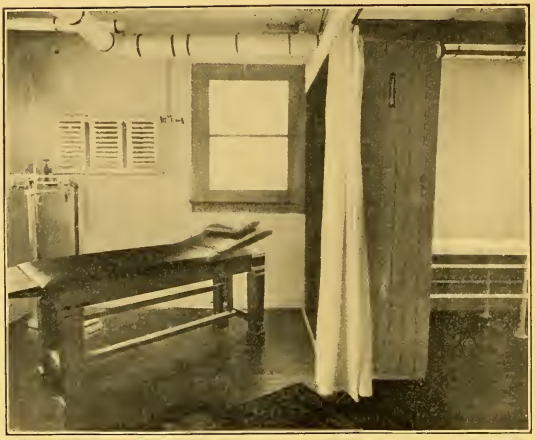

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These managers are expert in the use of massage, and employ it when indicated. When used in the proper cases, it adds very much to the rapid recovery of the person taking the bath.

The hours for men are 7 to 9:30 a. m., and 3 to 9 p. m. every day; and for women from 9:30 a. m. to 3 p. m. The price is from $1.00 to $2.00 for each bath or treatment.

The Charlotte Medical Journal

VOL. LXII CHARLOTTE, N. C., MAY, 1911. No. 5

BONE TUBERCULOSIS IN CHILDREN.

The Importance of Early Diagnosis and Treatment.

By Dr. J. F. Highsmith, Ex-President N. C. Medical Society, Fayetteville, N. C.

In all medicine, in all surgery, there is no disease so insidious in onset, so difficult of an early diagnosis, where an early diagnosis is of such paramount importance, and where early treatment has yielded such brilliant results as in Bone Tuberculosis in Children.

The disease is in reality an old one, but in the light of modern diagnosis, pathology and treatment, it is essentially a new one. Formerly we dealt with "White Swelling;" "Hump Back;" "Hip Disease," etc. Today we are in a position to recognize the disease in its incipiency and consequently to treat it in its primary stage.

We are dealing not only with a medical affection, but also with one of a surgical nature. It is medical primarily, and in a more advanced stage it is both medical and surgical. In its very incipiency a few weeks of enforced rest in bed would probably have cured it, but neglect this, pass it by without giving it the due consideration which it merits and surgical treatment becomes a logical necessity.

The trend of the times, is to get good results quickly. We glory in the fact that we can cure appendicitis, that we can perform a gastro-enterostomy, that we have mastered hernia, and we marvel with wonder at our success in the line of serum therapy, but when our attention is directed to chronic bone lesions, we see not in them the fascinations and the attractions which have lured us on to such wonderful achievements in other diseases. They are not even interesting to us. The general practitioner is too busy; the surgeon avoids the case if he can. Prophylaxis is the slogan of today. In no other affection can prevention be of more service than in Bone Tuberculosis in Children. It is to the general practitioner to whom we must appeal and it is to him only. From him we can get results only by his giving the patient his most careful and diligent attention in the primary stages of the disease—to recognize the condition early and to give treatment immediately.

The tide in the prevention of Tuberculosis is already high and is growing higher every day. The funeral dirges of one hundred and fifty thousand victims annually of Pulmonary Tuberculosis in the United States have at last awakened us from our lethagy. The people have finally caught the spirit of the times. In every state, in every county, and in every city, Anti-Tuberculosis Societies are being formed and in just the proportion in which these societies manifest their interest and enthusiasm, in the same proportion will Pulmonary Tuberculosis disappear from our midst; and as Pulmonary Tuberculosis becomes eradicated, in the same degree will Bone Tuberculosis be relegated tothe list of rare diseases.

The one prime pre-disposing cause in Bone Tuberculosis in children is malnutrition. Some co-existing factors usually present are poverty, bad hygiene and states of debility as follow measles, scarlet fever, typhoid, etc. Trauma stands in the relation of an exciting cause just as the lowered constitutional conditions stand as contributory causes. The one etiological element in the production of the disease is the Tubercle Bacillus, acting both locally and constitutionally. It is usually possible to demonstrate the presence of the organisms if the tissues can be submitted to examination. If the tissues themselves cannot be examined, bacilli may be found in 50 per cent. of the cases in pus aspirated from the affected regions. Like Tuberculosis of the Cervical glands, it is rarely preceded by other Tubercular processes, although it may be followed by them. Just how an individual joint becomes involved is not always clear, but it is probably that from the tonsils, lungs and alimentary tract the bacilli are sifted through the lymph glands and eventually carried to the blood stream.

The occurrence in children is usually from the third to the eighth year. While the disease may affect any or all of the bones of the body; the breadth of the subject and the time limit of the paper forces us to consider only the commoner seats of the lesion. These are the spinal column forming thirty-seven and five tenths per cent. of all Tubercular osseous lesions; the hip joint forming thirty-four per cent., and the knee joint forming twenty-one and five tenths per cent.

The pathology is the pathology of Tuberculosis elsewhere.

Usually there is a history of slight injury. About this point of lowered vitality, the organisms find a suitable culture medium. The stages in the process are first congestion, swelling and cell infiltration, followed by caseation and frequently by softening, suppuration, and necrosis.

The disease may be arrested in the early stage, encapsulation of the inflammatory products taking place. In joint affections the disease usually begins in the epiphysis and secondarily involves the joint. In the spinal column the focus is in the body of the vertebra. Disentregation and destruction of osseous tissue continue until the body of the vertebra is destroyed. Necrosis having taken place, the spinal column is no longer able to sustain the weight of the

body in an upright position. The body topples forward or latterally, depending upon the direction of the necrotic process, and the spinal column becomes angulated, or knuckled, giving rise to a kyphosis or to a scoliosis.

The symptoms of the disease are the same for each locality, being modified by anatomical structures.

When the spinal column is involved, there are first pain, night cry, peculiar attitude of the body, kyphos, muscular sasm, a slight emaciation and elevation of temperature. In children the pain is not usually referred to the spine, but more frequently to the abdomen, whereas in adults, it is in the back or radiates to the legs. "Night cry," is due to a spasmodic pain caused by the loss of voluntary muscular control in sleep. The attitude of the patient in walking or in standing depends upon the situation of the disease and its stage of activity. While walking or bending the spine is held rigid, flexion taking place in the hip joint. This rigidity is due to the reflex muscular contraction induced by the disease. The muscles involuntarily endeavor to protect the necrotic area from being pressed upon, since by such is pain induced. Later symptoms are abscess formation and paralysis. At some time in the course of every case of Pott's Disease, there is usually a cold abscess. Seventy per cent. of these abscesses are cared for by nature. Many of them burrow along lines of least resistance and evacuate themselves. From the lumbar and lower dorsal vertebrae, the pus seeks its way along the poas muscles and shows itself in the inguinal region just above Poupart's Ligament and in the thigh. When the focus is in the cervical region, the abscess usually appears on the side of the neck, or may manifest itself as a rectrophyaryngeal abscess. Paralysis is caused by pressure either as a result of the bending forward of the body or from direct extension of the disease to the membranes of the cord. In most cases the paralysis is in the nature of a paralplegia, both sides of the body being affected, and is more apt to develop when the disease is situated in the upper dorsal and in the lower cervical region.

In the hip joint, pain, limp and atrophy are the earliest signs noted. Limp is invariably present. Pain is an early and constant symptom. In a majority of instances in children it is referred to the knee and is commonly more severe at night than in the day. It is in Hip Joint affections that "Night Cry," is most frequent and severe. Later symptoms are deformity, shortening, abscesses, muscular spasm, limitation of motion and constitutional symptoms.

The history of Tubercular disease in the knee joint bears a close resemblance to the same process elsewhere; insidiousness in onset, intermittency in the severity, and even even the very existence of symptoms, the chronic character of the disease, a tendency to the development of deformities, and more or less complete anchylosis is characteristic of the process. The most important evidence of its presence are the following symptoms: Pain, Limp, Muscular Spasm and Deformity, Color and Surface Temperature, Atrophy, Flexion, Shortening, Abscess Formation and Constitutional Symptoms. Pain, Limp and Flexion are early and constant symptoms. When the focus is in the Epiphysis, pain is not likely to be severe. but when it begins to erode the cartilage it is more pronounced. It is usually more troublesome at night, and is referred directly to the joint. There is often marked tenderness to pressure over the outside of the joint.

The color of the skin varies with the stage of the disease. In mild types the skin is a dusky or reddish purple, simulating passive congestion. When suppuration is imminent redness becomes marked, and in a still more advanced stage, the skin becomes blanched, hence we derive the term, "White Swelling."

Provided we can elicit the above symptoms in their respective cases, we should have no trouble in making a diagnosis, but a typical set of clinical symptoms in the incipiency of an obscure process is a rarity and one difficult of recognition. Until a few years ago, our diagnosis depended solely upon the manifestation of clinical symptoms, but now we have added to our diagnostic equipment Tuberculin and the X-ray. If the articulation affected is suspected to be of Tubercular origin the minimum dose (1 to 3 milligram) of Koch's new tuberculin is injected into the back or thigh. There should be no reaction at the point of injection, but if the joint is Tubercular, there will be both a reaction in the joint and also a constitutional reaction. The reaction will occur in about eighteen hours. The constitutional reaction consisting mainly in an elevation of temperature, while the local manifestations will be swelling, tenderness, sometimes redness, muscular spasm and all the signs which are characteristic of an active process. It does not remain as a permanent condition, and speedily quiets down, usually in forty-eight hours.

Regarding the diagnostic value of the X-ray Dr. Carl Beck, of Chicago says, "During the last two years we have had a large experience with this classof cases (referring to Bone Tuberculosis. Our diagnosis is based largely on X-ray examination, which we have developed to a high degree of efficiency. Particularly through the use of stereoscopic radiographs in combination with Bismuth Paste injection we are able to make a very clear diagnosis of Fistulous tracts and their regions, and ramifications. We have used this method extensively and successfully in the treatment of Bone Tuberculosis in children." I will also add in addition to Dr. Beck's use of the X-ray in advanced cases that is also shows the extent and location of the necrotic osseous area in acute cases.

In considering the treatment of Osseous

Tuberculosis the first motive should be to keep the focus confined to the locality in which it originated, and to increase the patient's vitality, hence, increasing his constitutional resistance. To accomplish this object the treatment resolves itself into (local, constitutional, dietitic and hygienic.) The one aim of local treatment is to secure REST. When this is done at an early stage Nature will usually take care of the process. The muscular spasm about the joints or spine is but an effort on the part of Nature to protect the diseased area. Thus by the sympathetic action of the muscles, Nature is placing protective barriers around the defenseless and the devitalized portion o fthe body which is at the mercy of the Tubercule Bacilli, thereby giving the tissues time to throw out or to form an encapsulating wall. So let us imitate Nature by assisting her to secure rest to the part. We can best do this by requiring rest in bed, and by the use of mechanical appliances. When the limbs are involved plaster cast should be used and applied at once and the patient enjoined to remain in bed until the acute symptoms subside. When the hip joint is involved nothing is better than a long plaster spica extending from the waist to the ankle; for the knee use a plain cast, extending from groin to ankle. When the spinal column is affected, the mechanical device varies with the region involved, but the object in each instance is the same, that is to secure rest to the diseased arear. When the first swmptoms of Pott's Disease are noticed, put the patient to bed and insist upon his remaining there at least during the entire period when destructive processes or changes are taking place, and when the acute symptoms of pain, muscular contraction, temperature, night cry have passed away, constant recumbency may be dispensed with and the patient permitted to be up, wearing a form of apparatus devised to accomplish fixation and hyper-extension. Methods of immediate forcible correction have been abandoned. The constitutional, dietetic, and hygienic treatment is the same as in Pulmonary Tuberculosis.

The question as whether or not to operate after abscess has formed is well answered by Dr. Virgil P. Gibney, of N. Y. He says, "Place the part at rest, using the best hygiene and avoid secondary infection, if possible." It is a sadly recognized fact that these abscesses when they are opened and drained, Tubercular Bone removed, etc., that they become secondarily infected and continue to discharge, even for many years. If the abscess has not ruptured, the pus may be aspirated and a 10 per cent. Eumulsion of Iodoform injected into the cavity and the puncture hermetically sealed. This procedure will probably have to be repeated several times. But at the present, it is the best method of dealing with Tubercular abscesses. If the abscess has already evacuated itself and continues to discharge the Bismuth Paste of Beck should be injected. This is a mixture of 33 per cent. Bismuth Subnitrate and 67 per cent. vaseline. It was used by Dr. Beck first, merely for diagnostic purposes on account of the impenetrability of Bismuth to X-rays. The cavity was injected and a skiagraph was taken to determine the extent and the direction of the cavity. This gave a clear conception of the Tubercular cavity and soon he noticed that these cavities healed.

It then became a therapeutic agent. The technique of the treatment is simple; the cavity is injected with the paste, a light compress applied over the sinus and left in situ for a week. If the case shows marked improvement no further injections are made, but the superficial wound is dressed daily. If after one week the character of this discharge and its amount does not change materially a larger quantity should be injected in order to reach all of the sinuses. The injections should then be repeated every three or five days until the sinuses close. If, after two or three weeks, no improvement is noticed, then the cavity should be searched for sequestra, which are usually the cause of failure. With this treatment 60 or 70 per cent. of the cases will heal.

And in conclusion, let me reiterate in brief. First, the importance of an early diagnosis. When an Osseous lesion is suspected of being of Tubercular origin, do not under any circumstances ignore the gravity of the condition; do not mistake the pathognomonic "Night Cry" for Growing pains; do not be deceived by the fact that limp is due solely to injury; and be slow to admit that atrophy is but the sequence of paralysis. But call in your every aid, equip your diagnostic armament to the fullest; use the Tuberculin test, have a skiagraph made, and do all in your power to determine the nature of the pathological process.

And secondly, the problem having been solved, and if the case be Tubercular, then inform the mother, gain her co-operation, put the patient to bed, and give him REST, forced feeding, fresh air, and as near as possible, all the comforts of a modern sanatarium.

Physiological Action of Certain Electrical Currents.

By Chas. M. Hazen, M. D., Richmond, Va.

Professor of Physiology, Medical College of Virginia; Electrotherapeutist to the Memorial Hospital.

Read before the Richmond Academy of Medicine and Surgery, December 13, 1910

It is without apology that I approach the discussion of electrotherapy, although to many physicians and surgeons the subject is almost tabooed, or, at least, relegated to the department of suggestion and psychic effet. The history of medical electricity to those who are acquainted with it and the results obtained by those who are competent

to practice it are a sufficient argument in its favor.

In discussing the above title, I shall limit it to medical application and leave to one side such lines of work as are surgical, e. g., electrocauterization, electrolysis of tumors, etc., and shall maintain its importance in metabolic and nervous diseases, in the study and treatment of which it is a foundation stone.

In the older literature, the use of the galvanic and faradic currents have their well-established place and the good results of these currents, properly used cannot be doubted. They have persisted as a sine qua non in diagnosis. The sinuscidal current as derived from the old fashioned, hand electromagnetic, is one of the best emergency instruments for artificial respiration or in hysteria, and in its later development has a field of usefulness.

The physiological effects of these currents, the galvanic, faradic, sinusoidal, is decidedly limited by their low voltage; and this is one, though not a chief reason for the supposed inefficiency of electrical treatment as ordinarily understood.

The voltage of a current is the electromotive force, comparable to the "head" of a stream of water. One reason why high voltage is best is that the resistance of the body to electricity is more readily overcome. The other and more important reason is that it has a better physiological action.

Our knowledge is limited as to the exact relation of electricity to cell-activity. Electrical currents are manifested in active and in injured tissues; but that "electricity is life," or that "nerve force is electricity" is by no means true. Neither is the animal body or the cell an electrodynamo—the **thermodynamic** theory of life being that which must be considered by every argument the correct one.

Neither is any importance to be attached to the vague ideas so often advanced about various kinds of vibration and their relation to life. If molecular vibration in the cell is the basis for electrical effects, at least we do not know it and cannot prove it; and electrochemical conditions inside and outside the living body do not justify this assumption.

We have in this discussion excluded electrolysis as an electrotherapeutic method; and I think we are justified in excluding electrolysis as a physiological effect. This is an important point, because by many authors the production of ozone in the tissues is emphasized as one of the great results of the high-voltage currents. One answer to this is that at the same time, nitrous oxide is developed, which, although it might, as is claimed, have antiseptic effects, at the same time would most certainly be deleterious.

As far as my observation and experience go, it seems far better to simplify our ideas about the physiological action of electricity and conclude that, for reasons unknown and perhaps undiscovered, **electricity is one of the most suitable artificial forces for the stimulation and regulation of cell acticity**; we are here comparing it with other forces, such as drugs, heat, light, radiation and mechanical vibration.

The above conclusion as to the physyiological action of electricity is the cornerstone of our structure of electrotherapy. From this standpoint we can examine results, compare currents and methods, and work out a rational procedure.

Since the development of the static machine and the high power transforming coils, it has become evident that the balance of therapeutic value is in favor of high voltage currents. These currents are, in the ordinary nomenclature, the static platform insulation, static wave, static induced, and static spark and spray; the high frequency spark, spray, vacuum, the autoconduction and autocondensation. These names can be improved upon in behalf of a better description and classification.

The application of the above currents is the task of the modern electrotherapeutist. There is no hope or expectation that they are panaceas or that they will displace other methods that have proven valuable, such as drug treatment, hydrotherapy, etc.; but it is found that they are in certain cases specific, in others adjuvant, in others of no apparent use and sometimes contraindicated.

Going back to the dictum as to the stimulative and regulative value, the continuous unipolar static current ("static insulation") is of value when the indication for the patient is general stimulation and regulation. The current permeates every tissue and cell of the body, stands the hair on end, warms, produces perspiration, raises blood-pressure, augments circulation and respiration; applied to a particular part, that part is especially stimulated and regulated. There is a general restoration of balance and as a rule, rest, quietude and sleep are the natural results. Such effects are plainly invaluable in nervous and metabolic disturbances.

The continuous, bipolar static current is, so far as I am aware, not mentioned in literature nor used by other operators than myself. It has been under experiment and trial for about two years and is one of the most valuable. I take this occasion to announce its method and applications.

What I have called the unipolar static current is applied with one plate connected with the chair of the patient or some part of his person; the return current to the other pole is through the air. The bipolar current is applied by two electrodes in contact with the patient, one from either pole. This is nothing more than the galvanic method substituting the high-tension static current for the galvanic; and, as a rule, where in well established lines of treatment you read galvanic, you may safely and with far better results use continuous, bipolar static.

The effect of the galvanic is in many conditions valuable but mild. The bipolar, continuous static is much more effective on account of the higher electromotive force.

There are some mechanical advantages about this current; the metal electrodes do not have to be covered with sponge or cotton or moistened. Onthe other hand, the static machine sometimes loses its charge while the current is being given, especially the Holtz machine.

Without discussing in full the applications of the current, it may be said in illustration of its use that it is the great treatment from an electrical standpoint for nerve inflammations, such as sciatic and other neuritides, and nerve degenerations, such as occur in anterior poliomyelitis.

By way of caution, I would say that I have not so fa ras a rule, given this bipolar current in full to infants, but modify the treatment by using one pole with return through the air, and still further modifying it by having the nurse hold the child and thus get a part of the dosage. The results in a series of infantile spinal paralysis cases have been noteworthy.

The bipolar interrupted static current ("static induced") may be mentioned next. It resembles, but surpasses in value the faradic current, and is used similarly for diagnosis and treatment.

Unipolar interrupted currents with the variations which may (as I believe) be correctly included under this head, embrace every spark and brush method, whether commonly known as static or high-frequency. It should be said, however, that short and extremely rapid interruptions carry with them a certain amount of continuous current, and this is particularly true of static brush, vaccum tube and high-frequency discharge in general. All these interrupted currents are oscillartory, since the patient, the Leyden jars, coils of wire or other condensers are in circuit and are continually charged and discharged. Pratically all of these currents are especially applicable to metabolic derangements. They lower blood-pressure—a beautiful illustration of the regulative effect, which I have affirmed; since high blood pressure is, generally speaking, due to irregular metabolism.

Further than the general lines above indicated, it is impossible to specify in this paper the variations in method and application of these currents.

In conclusion, I regard the foundation principle of electrotherapy to be the stimulative and regulative power of electricity upon cell-activity.

Its great application is to derangements of metabolism and of the nervous system.

The high tension currents are conveniently classified as:

1. Bipolar continuous high-tension;
2. Unipolar continuous high-tension;
3. Bipolar interrupted high-tension;
4. Unipolar interrupted high-tension;

the last includes high frequency currents* in their many varieties of methods and applications.

*Biploar high-frequency applications are an apparent exception.

A Plea For the Protection of the Innocent.

By H. C. Buck, M. D., Friars Point, Miss.

We are prone to boast of our Country and proudly pose as the most refined and cultivated nation on earth. We justly feel proud of the grand fight that has been and is still being made to conquer and eradicate the tuberculous disease. But if one will pause and consider existing conditions, he is inclined to the opinion that much of our boasting (to use slang) is "hot air." While we gladly admit much noble work is being done by our State Board and many others in the fight against tuberculosis, we must also admit that absolutely nothing is being done to conquer or check venereal diseases, which are conceded by all observers to be the greatest curse of the human family. It would seem too, that the fight on tuberculosis is almost exclusively confined to cities and centers of population, very little, if any pioneer work or work in rural districts is being done, but in this connection I gladly make an exception to our own State Board who are making an honest earnest fight all over our State, but their fight is in its infancy. Quite recently a negro man fell on the streets of my town and died before a physician could reach him. This negro had been a victim of pulmonary tuberculosis for months, yet, up to within a few days prior to his death the authorities had allowed him to drive a public hack and haul passengers to and from the railroad depot. The day after this man died I was called three miles in the country to see a negro man, whom I found dying with consumption, he died that night, while he had been sick for months he told me I was the only physician he had called upon and I saw him then for the first time. If either of these negroes had had small pox or measles and been allowed to run at large there would have been a mighty howl from all points, yet, they were infected with a disease more deadly and far reaching in its effects and equally as contagious. Yet nothing seemingly was thought of it.

For several years past the cattle in different parts of our State have been infected with "Texas Ticks," and large numbers of cattle have died from "Tick Fever," for several months the United States Government have had men in nearly every county in this State, at a tremendous outlay of money, in an effort to eradicate the tick and save the cattle. How much has the Government spent in our State, or in any State, to eradicate the tuberculos disease, or the venereal diseases, and save the people? It would seem that our great Government places a higher value on and are more

solicitous for the welfare of the cattle, than for the people of our country, especially our country people or those living in rural districts.

Not so very long ago a lady of one of the eastern states wrote the department at Washington that she had consumption and asked for information by which she could obtain relief, they wrote her they could do nothing for her; she died within the year. About the same time one of this lady's neighbors wrote the department that his hogs had the cholera and asked for information by which they could be relieved, which was promptly sent him and the hogs lived; the moral of which is, if you want the protection of the Government be a hog or a cow.

We as physicians well know that a very large per cent of men and boys who have passed the age of eighteen years either now have, or have had, syphilis or gonorrhœa or both. Writers on gynecology tell us it is simply appalling to find so many married women, and even young girls, who are affected with one or the other of these diseases, a very large majority of whom are innocent victims. We know too that there is in nearly every town and community cases of tuberculosis, yet there is no law to protect the innocent and unsuspecting from the contagion; the tuberculous man or woman marries, unhindered by a word of protest from any one. A man who has syphilis or gonorrhea takes a treatment and through ignorance of the great tenacity of the disease and feeling he is entirely cured, marries, there is no law to prevent his doing so, no law to protect the pure and innocent woman, but who can foretell the woe and misery that is almost sure to follow! What is the remedy? It would seem to me that our only hope lies in painstaking and general education, yet when we study the environments of our so-called cultivated people, when we know that prudery and false modesty hold us as with a grip of steel the task of educating the people along sexual lines seems a hopeless undertaking. Doctor William Lee Howard says, "We are maudlin drunk on prudery."

Indeed it would seem that we are. Some time ago I suggested to a lady, who is a very enthusiastic club woman, that it would be a good idea for her club to take up the question of "Sexular hygiene." She told me afterwards that she introduced the subject at a club meeting but such a storm of protest arose that she was discouraged. These ladies, nearly all of whom are mothers, were so completely enveloped by prudishness and false modesty that they could not, or would not, recognize the grave importance of the subject. We have always been taught to look upon China as a heathen nation, and we, as well as other civilized nations, send missionaries tothat country to convert those heathens to our religion and to our civilized customs. I quote from a recent issue of a daily paper as follows:

"From the distant orient a foreign traveler has visited this country, he comes as the representative of the 'Emperor of China," his purpose was to secure improvements for his people. While here he studied the customs of American people, the people themselves and their surroundings, when asked what impressed him as most remarkable in this country he replied, 'the lack of honor.'"

In "The American Journal of clinical medicine," for January, is an article entitled. "Immorality Among Our Women, The Causes Thereof, and the Remedy," in which the writer boldly asserts "that immorality among our women is making forward strides to an alarming extent." Again he says, "There are women in the higher walks of life, women who move in the so-called 'best society,' who are guilty of unnameable crimes, so that if the light were turned on them the women in the slums and the red light district would seem clean and almost angelic in contrast with these moral lepers."

Can these things be true? Surely there must be some grounds upon which these men base their opinions. Truly has a writer said, "That ignorance or innocence of vice is no safe guard to the young man or woman in this age, when it is so evident on every hand."

Some time since there was in the City of New York an exhibit where were displayed the many inventions and devices for the protection of human life and limb, as well sa an exhibit of the best protection against the tuberculosis diseases, yet in all this display there was nothing to show that such a thing as venereal diseases ever existed, still less a suggestion as to any means by which the human family can be protected from the dread ravages of these diseases. Why is this? and what is the remedy? or what can eb done to overcome this indifferenee to the existance of a curse that claims untold numbers of victims every day; is it not time that something was done?

At present there is a great deal being said about "Child Labor" and the great hardships inflicted upon the children of the laboring class in large manufacturing centers, and much good work is being done to remedy this great evil. But strange to say the advocates of this great reform are totally blind to the fact that these very children, living as nearly all of them do in crowded tenements, are exposed to a moral and physical blight far more deadly than the hardships of manual labor. While this is truly deplorable in that they never know the joys of childhood nor have an apportunity of being normal happy children, yet only their body is deformed, on th eothet hand the venereal diseases and their immoral surroundings cause the blight and ruin of both soul and body.

While we know late investigation has proven beyond a doubt that tuberculosis is of tuberculous parents may escape the disease, we also know such children come into the world handicapped, as in nearly every

instance they have frail bodies and delicate constitutions, hence are all the more susceptible to disease germs. Onthe other hand we know that syphilis is an heriditary disease and is passed from parent to child even to two or more generations. Hence, my plea is not only for innocent pure women and girls, but for unborn generations. I believe there should be laws regulating or controlling marriage and no man or woman should be allowed lisence to marry without first being examined by at least two reputable physicians and obtaining from them a clean bill of health, especially as regards tuberculosis and syphilis.

In conclusion I will say this is not an original idea of my own but is being freely discussed and advocated by many thinking and observing men in nearly all parts of the civilized world.

Read before "The Clarksdale and Six Counties Medical Society," at Clarksdale, Miss.

*LOUIS PASTEUR.

By F. Webb Griffith, M. D., Asheville, N. C., Late of Johns Hopkins Hospital Staff.

In the early morning of December 27, 1822, Jeanne Etiennette Pasteur gave birth to a son to whom later was given the name of Louis. The dwelling in which this infant was born indicated that its occupants were of the humbler class and of limited means. Scarcely a passing comment heralded the birth of this son of Dole in the France Comte, but could his future have been forseen, the learned of all countries, like the wize men of old, would have brought their tributes to his humble cradle. Today the traveler pausing before a delapidated house in Dole reads the inscription in gold,

"Ici est ne Louis Pasteur
Le 27 December, 1822."

Shortly after the birth of Pasteur, his parents moved to Marnoz and although living here only a short time, the house in which they resided is still known as "Maison Pasteur." In 1824 the family again moved to Arbois, where the father, Joseph Pasteur, had charge of a small tannery. Although financially poor and scarcely more than able to provide the necessities for his family, yet Joseph Pasteur was a man whose character could be studied with profit. A long and honorable service under the banner of Napoleon had instilled into him a great love for his country and a devotion to duty, and the cross of the Legion of Honor which he had received from the hands of the Emperor was ever a stimulus to his patriotism.

Jeanne Etiennette Pasteur, though busy with many household cares, spent much time in the company of her children and to her silent influence is attributed to no small degree the success of her son.

It was at the "Ecole Premaire" that Louis Pasteur received his first instruction. It was the custom in this school as in most others of that time, for the best pupil in a class to act as monitor and to teach the others, and it is recorded that this was the first honor for which Louis Pasteur strove.

By many sacrifices of his devoted parents he was later able to attend Arbois College. Let us not get the idea that Pasteur was an extraordinarily bright youth, or that he was the leader of his class, as many would fain picture him, but rather a sone of the average students.

His father, wishing to help him and also to benefit himself, was his constant companion in his studies, and thus instilled into his son those admirable qualities so prominent in himself. As was natural for one of his age, young Pasteur preferred to be out-of-doors engaged in some sport rather than in the monotonous tasks of the school room. Nevertheless he conscientiously attended to his duties and was scrupulously exact in his tasks even to the most minute details. His favorite studies during this period were literature and drawing, and so much did he specialize upon these and he seemed so well suited for that line of work, that it appeared to be his calling.

It is a noticeable fact that college students who have decided upon a definite course for their life work, have a great tendency to neglect or even discard those studies which they consider irrelevant to their chosen profession. And what could seem to be farther apart and of less mutual benefit than drawing and science, yet no less a man than the great Emil Fischer has credited some of Pasteur's discoveries to that fine sense of perception, cultivated while at college.

At Arbois Pasteur had great regard and admiration for the head master, M. Romanet, and it was to his influence that Pasteur made one of the decisive steps of his Ecols Normale. Consequently, in October, career, when he determined to try for the 1838, he left for Paris realizing fully the deprivations his parents were undergoing and determined to make the most of the next few years. Unfortunately, however, like many students before and since his time, he became afflicted with the distressing malady of nostalgia and after a few weeks returned to Arbois. But the desire for higher education had been created and the following months of comparative idleness were most depressing, and soon he decided to make another attempt. This time he chose the Royal College of France Comte, and as an evidence of his good record there, it will suffice to state that at the end of his first year he was offered a position as an assistant instructor while still a student himself and only eighteen years of age. In our limited space we cannot get a better insight into the character and purposes of young Pasteur at this period than by studying a letter written by him at the beginning of his second year at the Royal College.

"My dear parents, my sisters, when I re-

*Condensed from thesis delivered for degree of Master of Arts.

ceived at the same time the two letters that you sent me I thought that something extraordinary had happened, but such was not the case. This second letter you wrote me gave me much pleasure; it tells me that—perhaps for the first time—my sisters have willed. To will is a great thing, dear sisters, for Action and Work usually follow Will, and almost always Work is accompanied by success. These three things, Will, Work, Success, fill human existence. Will opens the door to success both brilliant and happy. Work passes these doors, and at the end of teh journey Success comes to crown one's efforts. And so, my dear sisters, if your resolution is firm, your task, be it what it may is already begun; you have but to walk forward, it will achieve itself. If perchance you should falter during the journey, a hand would be there to support you. If that should be wanting, God, who alone could take that hand from you, would Himself accomplish its work. * * * May my words be felt and understood by you, dearest sisters. I impress them on your hearts. May they be your guide. Farewell. Your brother."

Suffice it to say that in a short time, Pasteur became enrolled at the Ecole Normale of Paris. Here he was thrown under the powerful influence of some of the greatest men of his day, and his plastic mind and responsive nature were soon moulded into harmony with those who were to exert marked influence over his future career. To Jean Baptiste Dumas is due to a great extent the honor of Pasteur's success. Dumas, the discoverer of the principle of substitution, was a man of attractive personality and of magnificent delivery, and it was his Sorbonne lectures that clinched the purposes of Pasteur. So long as the life of Pasteur shall be recorded, the name of Dumas will be intimately connected with it, and to him will be given the honor of having instilled into Pasteur the enthusiasm and perserverence so characteristic of his later life. To Balard and Delafosse is due honor, to the former for his admirable instructions in chemistry which were an important aid in Pasteur's work, and to the latter for his revelation of the intricacies of crystallization which ultimately led to discoveries in the spheres of crystallography, which alone would have made Pasteur a great man. A short time previous to this, Provostage had published his work on racemic acid, tartaric acid, and their salts; and Biot had demonstrated a relationship between certain crystalline forms and the rotation of the plane off polarization. Mitschlerlich, the renowned chemist of Berlin had also done a large amount of research along this line, yet the whole subject presented a very hazy aspect and contained many conflicting statements. Mitscherlich had stated that the tartrate of Sodium and Ammonium rotated the planes of polarized light, whereas the paratartrate (racemate) did not; and also that "the nature and the number of atoms, their arrangement, and their distance from one another are the same in both bodies." It was to clear up the doubt that arose in his mind from these inconsistent statements that Pasteur undertook the study of these crystals. While examining the racemate crystals, Pasteur, by his acute sense of observation, noticed a fact which had been overlooked by previous observers. These crystals, all of which had been formerly considered identical, were to him capable of being divided into two groups, those whose faces turned to the right andthose whose faces turned to the left. As has already been mentioned, the great Emil Fischer attributed this discovery to that fine sense of perception developed by his portrait work while at college.

Carefully Pasteur separated the crystals one by one into their respective groups and found that one group rotated the plane of polarization to the right while the other rotated it to the left. Then, mixing together an equal number from each group, he found that there was no rotation, proving conclusively that the racemic form was due to the presence of both dextro and laevorotatory forms which mutually counterbalanced.

So many brilliant experiments and discoveries followed in such rapid succession, that the true significance and value of each was not fully appreciated, nevertheless some were of such inestimable importance that they demand at least a passing comment. In his work upon fermentation, he was continually involved in discussions with the leading men of his day, such as Bastian, Pouchet, and the famous Justice Liebig, whose ipse dixit was then taken as final. After many years of hard and discouraging labor, he completely revolutionized the views upon fermentation, and in 1862 won a public victory over his opponents, thus firmly establishing the principles which time has proven to be correct. For this achievement he was elected a member of the Academy of Sciences. Pasteur, though modest, realized his ability and was ever ready and desirous of helping his fellow men. His studies upon the diseases of wine and manufacture of vinegar saved large sums of money annually.

In the year 1865, there broke out an epidemic among the silk-worms of northern France, and this industry, which previously had been so prosperous, now seemed doomed. In their distress the inhabitants of northern France sent for Pasteur to come and help them, and like the Apostle of old when called to Macedonia, Pasteur sacrificed his personal desires and went to their assistance. In a comparatively short time he had thoroughly investigated the situation, discovered the cause of the epidemic, and applied a treatment, based upon scientific principles. As a result, an inestimable amount of money was saved, untold misery relieved, and still greater, the sphere of animal pathology was opened up to Pas-

teur.

On October 19, 1868, the people of France were startled by the news that their Pasteur, whom they had learned to love as well as to admire, had suffered a cerebral hemorrhage and a resulting paralysis. Though wavering between life and death, his mind was still upon his studies, and in one of his clearer moments he was heard to murmur, "I am sorry to die, I wanted to do much more for my country." However, the Omnipotent in his divine wisdom, saw fit to spare the life of Louis Pasteur and to enable him to resume his work within a few months. This affliction impressed upon Pasteur the fact that the greater part of his life had been spent, and spurred him on to use the remaining years to the best advantage.

Had Pasteur died at this time, he would have left behind him an immortal name, yet the two things above all else for which he is known outside the scientific world, had not been accomplished. I refer to his work upon micro-organisms as the cause of disease, and to immunity.

The condition of the French Government at this time was not the best, for the Franco-Prussian war had placed it in a rather embarrassing position. Pasteur as a loyal son of France, was most deeply impressed and his scientific work greatly hindered by his constant thoughts and desires for the well-being of his country and his fellow men.

In reading some of the letters written by Pasteur, one is struck by his great dislike to all things Teutonic, and unfortunately this tended to have an unfavorable influence upon his work.

When in 1878 there was a vacancy in the section of the Free Associates of the Academy of Medicine, Pasteur was chosen to fill the position. He gladly accepted in order that he might better promulgate those theories which he knew to be true and of inestimable importance to mankind, and also that he might be more intimately associated with the distinguished Claude Bernard.

Today, as we watch the surgeon open the abdomen, amputate a limb, or do any other major operation, with absolute confidence that there will not be, or at least should not be any contamination or infection, we cannot realize what awful conditions prevailed scarcely more than a quarter of a century ago. The following extract descriptive of the conditions existing in pre-antiseptic days is appropriate: "A pin-prick is a door open to Death," said the surgeon Velpeau. "That door widened before the smallest operation; the lancing of an abscess or a whitlow sometimes had such serious consequences that surgeons hesitated before the slightest use of the bistoury. It was much worse when a great surgical intervention was necessary, though through the irony of things, the immediate success of the most difficult operations was now guaranteed by the progress of skill and the precious discovery of anesthesia. The patient, his will and consciousness suspended, awoke from the most terrible operation as from a dream. But at that very moment when the surgeon's art was emboldened by being able to disregard pain, it was arrested, disconcerted and terrified by the fatal failures which supervened after almost every operation. The words pyaemia, gangrene, erysipelas, septicaemia, purlent infection, were bywords in those days."

Ask any student of science today, to whom is due the honor for preventing these horrible post-operative conditions and you will invariably receive the answer, "Sir John Lister." While no one would think of detracting in the least from the glory which Lister deserves for his strong advocacy of the principle of antisepsis, yet he himself attributes his success to a great extent to the influence of Pasteur.

If you will permit me, I will reproduce a letter written by Lister to Pasteur, dated from Edinburgh, February 13, 1874: "My dear Sir, allow me to beg your acceptance of a pamphlet, which I send by the same post, containing an account of some investigations into the subject which you have done so much to elucidate, the germ theory of fermentative changes. I flatter myself that you may read with some interest what I have written on the organism which you were the first to describe in your Memoirs sur la fermentation appelee lactique.

"I do not know whether the records of British surgery ever meet your eye. If so, you will have seen from time to time notices of the antiseptic system of treatment, which I have been laboring for the last nine years to bring to perfection.

"Allow me to take this opportunity to tender you my most cordial thanks for having, by your brilliant researches, demonstrated to me the truth of the germ theory of putrefaction, and thus furnished me with the principle upon which alone the antiseptic system can be carried out. Should you at any time visit Edinburgh, it would I believe, give you sincere gratification to see at our hospital how largely mankind is being benefitted by your labors.

"I need hardly add that it would afford me the highest gratification to show you how greatly surgery is indebted to you.

"Forgive the freedom with which a common love of science inspires me, and

"Believe me, with profound respect,

Yours very sincerely,

"Joseph Lister."

Out of appreciation for the great services which Pasteur had rendered and the vast amount of money he had saved to the people of France with practically no financial benefit to himself, the Government did what it had done but twice before in that century, voted him a national recompense.

Since the beginning of the eighteenth century, it had been suggested that possibly micro-organisms were the cause of certain diseases, but no work had been done to

prove or disprove it until the latter half of the nineteenth century. Having become strongly suspicious that micro-organisms were etiological factors in the production of disease, and stimulated by his work upon the silk-worm, Pasteur entered body and soul to investigate the subject. As a result, he demonstrated the cause and treatment of the great anthrax epidemic among sheep and again saved vast fortunes. But still more important were his untiring efforts to alleviate the appalling conditions existing in the hospitals. The mortality in the maternity wards from child-bed fever was over fifty per cent, whereas, thanks to Pasteur and Semmelweiss, it is today only a fraction of one per cent.

By this time, the achievements of Pasteur had become familiar to the most uneducated, and his name was spoken almost with reverance by the thousands who owed so much to him. Yet let us not get the false impression that these ideas, which time has proven correct and of such inestimable value, were universally accepted, for from the very fact that they were revoluntionizing, they met with bitter opposition.

As a fitting climax to the glorious achievements of Pasteur, came his work upon hydrophobia. In this can be seen the result of a brilliant mind and a lifetime of hard labour, for scarcely could one less familiar with the different branches of science have mastered the many and seemingly insurmountable difficulties which confronted him.

On July 6, 1885, a little Alsatian boy, Joseph Meister, having been bitten by a rabid dog, was brought to Pasteur. Although his experiments upon immunization of animals against rabies had proven successful, yet Pasteur hesitated before attempting it upon a human being. Convinced, however, that if death should result from the experiment it would at least be no worse than if the disease were allowed to run its course, he took the decisive step. During the following days, Pasteur was in terrible suspense, work was impossible, and when at night slumber seemed to come to his rescue for a few moments, it was filled with horrible dreams of a child in the throes of death fro man experimental inoculation. When, however, the child had been discharged perfectly well, Pasteur had shown himself master of the situation, hydrophobia was no longer to be classed among the dreaded incurable diseases.

I have endeavored to state briefly a few of the most important facts in the life of Pasteur and some of his brilliant discoveries, but these simply serve to give a glimpse of the almost infinite influence of one human mind.

A complete revolution in medicine was begun in the latter half of the nineteenth century, and the credit is due to Pasteur, Lister, Virchow, Morton and others, but Virchow himself maintained that Pasteur was the greatest of them all.

The Royal London Society expressed its admiration of Pasteur in a communication containing the sentence, "Really, there is not in the whole world a man to whom medical science owes more than it does to you."

Charcot, the gerat authority upon nervous diseases, expressed his opinion of the great scientist in the following: "Certainly, there is none to whom our suffering humanity owes a greater debt of gratitude. His services to it in the past and in the future are incredible. His labors have been so vast that one is disposed to doubt that they are the work of a single brain, and not the contribution of several generations. He is certainly the glory of his native land, but he is more, he is also the glory of the close of the nineteenth century, and if it was still the usage to bestow upon an age the name of a single man, ours might justly be called the age of Pasteur."

On December 27, 1892, there assembled at the theatre of the Sorbonne, representatives from England, Denmark, Sweeden, Norway and other countries, to celebrate the seventieth anniversary of Louis Pasteur. Leaning upon the arm of the President of the Republic, and escorted by the Presidents of the Senate and of the Chamber, Ministers and Ambassadors, Pasteur made his triumphal entry amid the cheers of the enthusiastic multitude. In spite of the great opposition and many criticisms to which Pasteur had been formerly subjected, all were now united to honor and unfeignedly thank him who had done so much for mankind.

From the many addresses delivered that day, we have the following extracts: "Who can say how much human life owes to you and how much more it will owe to you in the future! The day will come when another Lucretius will sing, in a new poem on nature, the immortal Master whose genius engendered such benefits." And again, "May France keep you for many more years, and show you to the world as the worthy object of her love, of her gratitude and pride."

But how impressive it must have been when the great Lister, filled with emotion, uttered those memorable words, "You have raised the veil which for centuries had covered infectuous diseases; you have discovered and demonstrated their microbic nature."

Then followed the reply of Pasteur, containing that impressive and inspiring advice which every young man would do well to indelibly stamp upon his memory:

"Young men, young men, devote yourselves to those sure and powerful methods of which we as yet know only the first secrets. And I say to all of you, whatever may be your careers, never permit yourself to be overcome by degrading and unfruitful scepticism; neither permit the hours of sadness which come upon a nation to discourage you. Live in the serene peace of your laboratories and your libraries. First ask yourselves, what have I done for my education? Then as you advance in life, what have I done for my country? So that some day

that supreme happiness may come to you, the consciousness of having contributed in some manner to the progress and welfare of humanity. But, whether our efforts in life meet with success or failure, let us be able to say when we near the great goal, "I have done what I could."

Severe Contusion of the Abdomen with Visceral Lesions.

By William Wade Harper, M. D., Selma, Ala.

In the preparation of this paper, the author had in mind the rural surgeon. While often competent to do a laparotomy, he hesitates to do so from lack of hospital experience—facility or skilled assisance. As a rule, abdominal surgery should be done in a hospital and by experts, but there are cases that demand an operation at the place of injury. To send to a distant hospital a patient with a ruptured viscara and hemorrhage means a funeral.

What are the indications for an operation? In all severe abdominal contusions where shock becomes progressively worse under proper treatment or is not relieved at the end of two or three hours. If a doctor be not available for giving the anesthetic, any intelligent person can be pressed into service, provided ether is used and administered by the drop method. As long as the breathing is regular, the patient is fairly safe.

While an operating room is being prepared, a fountain syringe, basins, a pitcher, and all instruments as are steriled by being boiled. Several gallons of normal salt solution are boiled, covered with a sterile towel, and set aside to cool. An ordinary night gown, several sheets, and a dozen towels are dampened, loosely rooled in a sheet, and placed in the stove to be baked for twenty minutes. An ordinary kitchen table with a blanket and a sterile sheet makes an excellent operating table. A sterile sheet covers the table holding the pitcher and basin. By leaving the instruments in a carbolized solution there is less danger of fly contamination.

While patient is being etherized, the abdomen is shaved, scrubbed with soap and water, and mopped with alcohol containing bichloride 1 1000. The surgeon now completes his toilet by donning the sterile night gown and tying a sterile towel around his head. Many instruments are not needed. Every surgeons satchel should contain a dozen artery forceps, a pair of scissors, a knife, needles, a needle holder, silk, several yards of sterile cheese cloth for sponges and dressing a few envelopes of assorted sterile catgut, a fountain syringe and a large needle for hypodermoclysis. For retractors, the surgeon can use two large tablespoons with their handles bent into proper shape. This outfit is sufficient for any section.

In making the abdominal incision, clamp all vessels as they are before as they are. Arest all hemorrhage before opening the peritoneum. The omentum being the surgeons best friend, should be carefully manipulated. The intestines should be handled as little as possible, should not be eviscerated, and their mesentery should not be pulled upon. To do these things, lowers blood pressure and increases shock. If the liver or spleen has been ruptured, the organ is walled off with sterile gauze and the wound closed with mattress sutures of cat gut. If there is much capillary oozing, a gauze drain is carried down to the point of injury and anchored there with early absorbable catgut. After removing blood clots from the peritoneal cavity, the omentum is carefully replaced, and the abdominal incision closed. If one of the hollow viscera has been ruptured, the rent is carefully sutured by the Czerney-Laemz Lembert method.

If only a small quantity of gastro-intestinal contents has escaped into the peritoneum, the cavity is closed without douching and drainage. If, however, there has been much soiling, the cavity should be freely douched with normal salt solution and provision made for pelvic drainage. The abdominal wound is closed with through and through silk or silk worm gut, or preferably by the layer method if catgut be available. If patient is very weak, a slow hypodermoclysis is given by the anesthetist during the operation. Having completed the operation, the patient is returned to a warm bed and if condition will justify it placed in the Fowler position. 1-30 grain of strychnine is given hypodermatically every two hours and slow proctoclysis begun at once. The flow from the fountain syringe should be so regulated that it will simply trickle into the rectum. If this simple procedure is observed the solution will be retained and rapidly absorbed. The efficiency of the salt solution can be enhanced by adding a strong infusion of coffee. The proctoclysis lessens the intense thirst, dilutes the toxins and aids their elimination by flushing the kidneys, and is one of the best means for combatting shock.

For the first 24 hours, the author keeps everything out of the stomach and keeps the bowels quiet. This is imperative where the gastro-intestinal tract has been injured and in drainage cases. At the end of 24 hours, the serosa is fairly adherent and the

*Paper read by Dr, W. W. Harper before the Association of Surgeons of the Southern Railway at Richmond, Va., May 24, 1910.

area to be drained is quite well walled off. Finney now begins small doses of calomel repeats them until bowels act. Other operators, however, prefer not to give purgatives—relying on purgative enemas. If there is not much tympany, the author believes it preferable to wait 48 hours before moving the bowels. Then give as a purgative enema, eight ounces of old fashion black molasses and eight ounces of water. This can be repeated every two or three hours until there is a copious discharge of gas and feces. In rebellious tympany, sometimes one grain doses of calomel repeated every half hour until 10 grains are taken will relieve the situation. In one of the authors cases of reversed peristalsis where purgative enemas had failed to give the desired relief, the stomach was washed every four hours and after each washing five grains of calomel were left in the stomach. After 20 grains had been administered in this way, the bowels moved freely and the patient recovered. In desperate cases with severe distension, some surgeons recommend 2 drop doses of croton oil.

Should these various measures fail and there is persistent vomiting with or without fecal matter, the abdomen should be reopened and the first loop of intestine presenting itself ancho-red in situ, and punctured with a trocar.

The following case is of interest, J. T., white, male 30 year of age had been sick for about ten days with what was thought to have been malarial fever. The day preceding his serious illness he worked at his regular trade of shoeing horses. At midnight he was taken with violent colic and for relief took a dose of oil and Epsom salts. But instead of getting better he grew worse and I was sent for the following afternoon—fourteen hours after initial seizure. I found him suffering with severe pain, and marked rigidity, and tenderness of entire abdomen below the umbilicus. He had a temperature of 102 and a pulse of 120. Bowels were constipated, but there was no vomiting. I diagnosed suppurative appendicitis and advised immediate operation. Upon opening the abdomen, there escaped a quantity of greenish white fluid. The appendix was not diseased, but there was a typhoid perforation which was closed. The cavity was flushed and wound drained. The patient did well for two days. He then developed intestinal paresis which I could not relieve with purgative enemas. He soon began to vomit fecal matter. I reopened the wound and made an artificial anus. In twenty four hours his symptoms were relieved and he began to improve. However, he began to lose rapidly in weight from lack of colonic absorption. I made several unsuccessful attempts to close the fecal fistula. By closing it every two or three days (without an anesthetic) he quickly took on flesh. About the time he was ready to be out of bed he developed a femoral thrombosis which gave him a back-set. The day he was to leave the hospital, he had about a five inch invagination of the bowel through the abdominal wound. I had decided to wait until he was stronger before attempting a radical operation for the cure of his fecal fistula. But being unable to reduce the invagination, I at once did a lateral anastomosis. He did well for a few days when he was taken with a right sided pneumonia. As he was convalescing from this, he was seized with a left sided pleurisy. He finally made a good recovery.

For the persistent nausea, there is nothing better than stomach washing. After every laparotomy, the surgeon should ever be on the watch for acute gastric dilatation. Its symptoms are vomiting and marked distension of the epigastrium.

For the pain and restlessness following a section, Moynihan recommends 5 grains of aspirin where the stomach will retain anything. Where this will not be retained, give ½ grain of codein hypordermatically.

To most cases egg albumin can be given on the 2nd day. As soon as the bowels have acted, buttermilk may be given. The milk, however is given in small amounts and not oftener than every three hours. Gradually the quantity of liquids can be increased and by the end of the first week, a soft diet may be given if the patient is making satisfactory progress.

In drainage cases, the dressings are changed as often as they become soiled. All drains should be out of the cavity by the end of the week. In conclusion, let us caution against keeping these cases too long upon the back or in any one position, after the third day, urge them to move their legs about the bed. "This will improve the venous circulations through the legs and prevent femoral thromboeis."—Mayo.

"606."

Remarks About Its Nature and Observations of Its Use and Effects in Syphilis—Presentation of Cases.

By Paul Paquin, M. D.
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Illustrations of Cases by Prof. Abr. T. Wolbarst, M. D., New York City.

It appears to me certain that the pro-

perties of such organic arsenic products as cacodylic acid and cacodylate of soda in tuberculosis and other infections led to the evolution of so-called "606," a specific germicidal chemical substance of German origin, which is patented under the designation of "Salvarsan." It is described under the technical name of Dioxy-Diamano- Aresenobensol- Di- Hydrochloride. Empirically, its is said to amount to this formula: $C_{12}H_{12}O_2N_2As_2(Hcl)_2$, having for its base oxyphenlarsenic acid. However, there seems to remain in obscurity certain questions about its true chemistry, which naturally, are not set forth in the patent papers. In 1909, Ehrlich claimed for himself and his co-workers, Hata and Bernheim, priority in the manufacture of the preparation, showing that he had proceeded from "Atoxyl," which is the synonym of Sodium-Amino-phenyl-Arsonate.

As you see from the sample before you, "Salvarsan" is a bright yellow powder. Theoretically, it contains a little over 34% of arsenic with a strongly acid reaction. The various series of new medicinal arsenic compounds which Ehrlich and his associates brought forth in their search, meant seemingly to evolve an antisyphilitic remedy, ended in this 606th product; hence its name. It was found to be readily oxidizable, therefore it is sealed in inert gas in a special manner, to insure safely against decomposition. The clinician is warned nevertheless, **not to use it** if it is gray or brown or discolored otherwise; some changes it is alleged, contain as much as 40% of arsenic.

The alleged patent number of "606" in England is 13485. In America I do not know. In the specifications of the patent occur five chemical examples with formulas to prepare "606." These features are of interest to American physicians, first because of the sentiment among them against patenting any medical preparation, and then because it appears from the specifications of the patent application and the experience of numerous clinicians, that "606" has **probably not been of uniform composition**, and that there **probably remains still** to be done, some important chemical work to bring about a product of persistent character in composition, and hence more steady in action under given conditions.

The solubility of the preparation seems to be of the deepest importance in its therapeutic asepct. It appers from the most reliable tests and observations, that the most effective and safest injections were **until recently,** preparations rendered "very slightly alkaline,—"almost neutral," corresponding "as closely as possible with that of the blood and tissues." In this form, it is claimed, the solubility of this arsenic in the blood is at **its minimum.** At the present day, suspension in oil, seems "equally effective" and is being recommended and employed by several authorities, the main idea or theory being, it seems, to afford a slow but safe and sure amount of arsenic absorption **progressively.** "It is probable," says Michaelis, "that the relatively low toxicity of "Salvarsan" in comparison with other arsenic preparations, is due to the fact that it is "so insoluble in the blood," an idea which seems to hold good no matter how the medicine is introduced into the blood. For myself I find oil injections by far the safest and quite effective. It was used exclusively at the Good Samaritan when I attended.

The new remedy was first of all directed against parasites in general, but spirochetes and tripanozomes in particular, such as the spirilla of re-current fever, the plasmodia of malaria; naturally, Schaudinn's parasite of syphilis was early made a target for it.

The "chemo-therapeautic" nature of the drug sprang from the theory that immunity of Syphilis **does not exist,** and therefore neither vaccines nor serum therapy need be expected to have much value either **as preventive or curative measures.** (This by the way, is a theory which perhaps applies to leprosy and tuberculosis.) Its evolution to its present stage was made possible by the discovery of the parasitic nature of syphilis; the discovery of its communicability to apes and rabbits made by Metchnikoff, Roux and Bartarelli; and finally the Wasserman-Neisser-Bruck serum diagnosis, now modified by some technicians, principally Naguchi, of the Rockefeller Institute of New York City.

Prior to "606," its discoverers had considered and presumbly tested its immediate predecessor, which was aresenophenylglecin, as active as "606" but **more poisonous.** "Salvarsan" superceded this body after the establishment of this forbidding fact of grave poisoning property.

Before its use in human beings, "Salvarsan" had been tried on fowls suffering from spirrillosis, rodents infected with relapsing fever and rabbits inoculated with syphilis. Its particular effects, as well as its influence in special and in general on the animal tissues and animal system, and the dosage by weight of the experimental subjects had been fairly determined. Futhermore, experiments had been carried on with dogs in the same line, and to demonstrate various other points in many obscure questions. —particularly those involved in poisoning, action on the heart, kidneys, the nervous system, effects on the blood. Finally, before beginning clinical use, two physicians,—Hoppe and Wittneben,—assistants of Alt, at Uchtsprings, injected themselves. Afterwards the drug was tried on lunatics, and Schreiber began its exhibition in early syphilis.

At first thought and reflection on the use of a purely chemical preparation to cure an infection, one might, in view of the vogue of, and the constsntly growing belief in vaccine, sero and organo-therapy, think it unreasonable, and contrary to our present understanding that nature protects life dur-

ing infectious diseases by the formation of specific anti-bodies. With that theory as a basis for the treatment of all infections, it would seem that we should strive to increase these anti-bodies in the infected system. This reasoning were sound for syphilis if it were established that by anti-**bodies alone** immunity to syphilis were possible. This being denied, the need of the clinician was to secure a parasiticide that could kill the germs of the disease without damaging the blood or structures in which they live, and without destroying their natural anti-bodies. This is what "606" seems to do—, a preparation brought about by long perseverance and scientific research among the most remarkable kind in all the history of medicine. In other words, whereas as a rule, chemical substances that are parasitotropic— i. e. poisonous to germs are also organotropic, i. e., poisonous to the organisms harboring them, "606" does not affect the body nocuously **at proper dosage.** Nor does it influence the anti-bodies adversely. Ehrlich boldly characterizes "606" as "Therapia Sterilisans Magna". This opinion, however, doubtless borne of enthusiasm which is more than warranted, may prove exaggerated, for, as has been suggested directly and indirectly, by All, Lesser, and McDonagh, the microbe of syphilis might become tolerant even of arsenic treatment, and then sterilization of the system become modified if not nil after a time.

During my varied observations and study of a large number of skin diseases in various clinices of the East, particularly at the Good Samaritan Hospital, under the splendid control of the erudite Prof. Lapowski; the Skin and Cancer Hospital under the universally established expertness of Bulkley and the sound work of Drs. Fox, Clark and others; The Post Graduate School of medicine in the thorough practices of Prof. Gottheil, Prof. Pollitzer and other teachers, I have noted a classification of syphilis cases in the use and results of "606" about as following:—Primary or secondary cases; tertiary cases; hereditary cases and complicated cases,—the various physicians following more or less the plan of Martindale and Wescott. The para-syphilis cases, I think, should also be classed distinctly.

I have not had the opportunity to observe many cases very long or satisfactorily which were well within the lines of para-syphilitic conditions; I observed a few of the nervous or vascular system and saw tabes and progressive paralysis. From the results of "Salvarsan" in these leuetic conditions, so far as I had chance to see or learn, and as appears from authoritative reports, no brilliant cures need as yet be expected in them; hope of success should be entertained only at the very beginning of the symptoms. In primary and secondary syphilis, I have seen at these clinics and in my own recent treatements, specific sores of all sorts reduced in a few days,—four to twelve,—by a single injection: throat lesions, maculo-papular eruptions, ulcers of mucous membranes and skin, chancres, indurations, crusted syphilides, tertiary lesions of the palate, roseola, tongue hypertrophies, erosions, exanthemata, pustules, gangrenous spots, plaques, specific pharyngitis, specific angina, all reduced more or less quickly after one injection and some of them seemingly healed. I was advised that bone syphilis also yielded. On the other hand I saw slower healing processes; twice I witnessed increased suppuration of schancres, and it was pointed out to me that certain inherited syphilitic conditions, such as keratitis were less amenable and needed auxiliary treatments.

As to the permanence of results in the use of "606," I saw recurrences of external lesions and throat ulcers in three cases after one injection respectively, made about three weeks, two months and three months previously. All three happened to have been intravenous injections. I am told that recurrences after other forms of injection are also recorded. I have not the evidence.

In tertiary syphilis, the remedy seemed to be most remarkable in subduing gummata, periostitis and affected eyes; for instance specific iritis; but it appears that in all the lesions of this stage it is a specific remedy, and that it has a curing influence over certain inherited conditions in this class, while some other inheritances do not seem so far, to yield so readily. However, it is alleged, that all sorts of cases of syphilis do start to heal in as short a time **as twelve hours,** and I think that by close daily observation one can easily follow the process and progress of the cure in certain conditions. Leucorderma and condyloma also disappear under "Salvarsan." Many children involvements usually discouraging, are seemingly cured or improved materially.

As to complicated cases, I observed two under "Salvarsan;" one with pulmonary tuberculosis and one with a skin lesion which was diagnosed as a tuberculide. The injection did not damage the lungs and the syphilis lesions disappeared. Westcott records cases of tubercular and syphilitic lesions in which the former were benefitted; and notes secondary infections with streptocococi and stophylococci in which these germs simultaneously disappeared.

To the beginning of this year, it is said that Ehrlich has received reports of 12,000 cases treated by physicians to whom his medicine had been supplied. According to these reports a very few have suffered untoward results. They consist of twelve deaths, i. e, 1 death per 1,000. Of these one case, which had received 0. 5 gm. was termed a complication of malnutrition with lung and heart affections; one death was atributed by Ehrlich to "a matter of idiosyncrasy" and one was of a patient who had had previously two apoplectic attacks. Inauspicious symptoms in this person developed in the nervous system without gastric distur-

bances. There were tremor, sweats and loss of strength. Postmortem examination revealed acute parenchymatous degeneration of various organs. And then there was the unexplained death of a child ten days after a 0. 2gm. injection. There is so far no data available of the various accidents that must have occurred in the thousands of tests not here included.

In considering these cases, Martindale and Wescott give warning against arsenic **retention;** they suggest that particularly after using the medicine in muscular tissues, retention might be prolonged so that a second dose might lead to poisoning.

In Prague, Drs. Bohac and Sabotha report three serious ill effects, involving urine retention in some degree for as long as nine days; difficult micturation, slight albuminuria, loss of patellar reflex and other usual reflexes, marked rectal tenesmus and constipation. The authors who studied these results give perhaps satisfactory explanations, that is: that probably each of the patients were injected with improperly prepared solutions, and that methyl alcohol had something to do with the trouble, for some of the symptoms exhibited were those seen in methyl alcohol poisoning.

The proportion of deaths then, of 12 in 12,000 is not very alarming when we consider the nature of the remedy, its newness, and the general inexperience with it at the time. As Ehrlich points out, if chloroform, used every day, were administered as was "606," irrespective of heart disease and other complications, death might reach one or two per cent. I consider this conclusion fair.

Among the warnings, there has been suggested danger to the optic nerves, but so far it seems to have been a false alarm, even in cases with optic atrophy.

Another warning given is that in some persons, idiosyncrasy to arsenic exists, and to be sure on this point, it may be well to try, before injection, a cuti-reaction.

These warnings should be carefully considered in practice.

The most common after effects reported are "Headache, pain in the slimbs, shaking in the legs, sense of cardiac oppression, difficulty in breathing, nausea, loss of appetite." particularly after venous injections. I have noticed very little of these, but I have observed vagrant arm pains in two of my patients. In an hour or less they had vanished. I have seen also once, a thick infilteration of the face three days after injections.

The kidneys do not seem to be irritated—one case of slight albuminuria only being recorded of the 12,000 original cases mentioned above.

Temperature is said to rise a degree or two or even more, dropping down in two or three days. For a day or two, general health is sometimes lowered and there is paleness. I have noticed no such results in my experience. Indeed, in some instances, I have found prompt general improvement, at once, with little after effects; in fact, I have had patients keep steadily at work from the day of injection.

The contraindications given out today by the authorities are:

"Severe non-syphilitic retinal and optic disease.

Severe heart and vascular disease.

Severe lung affections.

Severe non-syphilitic kidneys.

Advanced degenerative processes, of the central nervous system.

Those suffering from angina and fever.

Wasserman's test or its modification, tried from about forty hours to fifty-two days after the injections, in about ninety recorded cases were as often positive as negative; and so, the opinion was expressed, that "606" perhaps has no action on the test, which is quite the reverse with mercury. I appears in fact that it neither hinders or favors hemolysis. However, errors of technique might bear some responsibility here.

The bacteriological invesigations of the treated blood have shown that the spirochetes disappear usually in 24 to 48 hours after the injection, but that in some instances they remain as long as 14 days, which may perhaps be explained in these by a specially slow absorption of the remedy. I have seen practically such a case in a colored boy.

There are three modes of injecting "606," viz: The intravenous, the intra-muscular, and the subcuteneous.

The intravenous method seems to have had the greatest number of advocates up to today, except in cases of advanced arteriosclerosis. Next comes the other two methods in the order just named, the subcutaneous gaining now more followers than a few months ago, chiefly at the expense of the intra-muscular method.

Intravenously, aside from dissolving "606" strictly according to tried formulas for which I refer you to text books, the administration is virtually painless, and in none of the many cases mentioned that came to my notice was there any immediate complaint of any serious malaise. The intramuscular injections seem to invariably produce a decidedly heavy swelling, with hard indurations at the seat of injection. I saw some lumps as large as a hen egg, and several larger still, all very hard, persisting three weeks to three months after injection. There was no fluctuation in them, nor as a rule very much pain, but there was naturally stiffness of the parts involved. I do not see how some of the buttock tomors that I say in New York, can escape sloughing sometime or other. Most kinds of subcuteneous injections also produce swellings but much lighter, more fugitive and attended with less pain.

By any injection method there is danger of inflammatory processes and necrosis of the skin if the drug escapes from the needle into it; and in intravenous injection, this may lead to most serious consequences

about the point of entrance into the vein; however, an expert can doubtless always obviate that.

The injections with the alkaline solutions subcutaneously or intramuscularly are more prone to be very painful for several days than with near neutral solutions, i. e.: those near blood reactions, but in **oil they are comparatively painless.**

It has been my good fortune to enlist the exceedingly valuable assistance of Prof. Abr. L. Wolbarst in my efforts to present pictures of remarkable cases treated with "606." (Dr. Wolbarst, as you doubtless know, is the translator of the new, large classical work on Syphilis of Wechselmann of the Virchow Hospital of Berlin, which bears the introduction of Paul Ehrlich himself.) Some of these pictures which I show you have never yet been exhibited; and all of them coming from so reliable and learned an authority, may be depended upon. The description of the cases that they show were written by Dr. Wolbarst himself.

Fig 1.

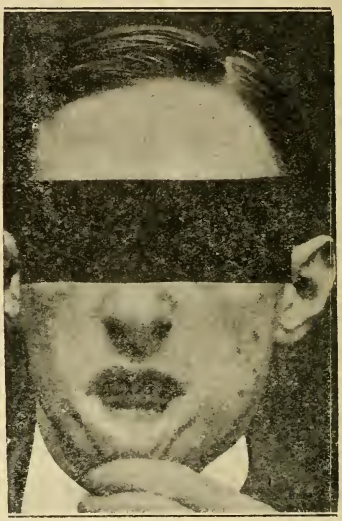
Case No 1. B. L. Aged 33 years.

Case I. B. L., aged 33. Infected eight months. Had not responded to mercury and iodides even up to the point of salivation. Had marked crust covered eruption on cheeks, a deep ulcer on lower lip, and mucous patches in mouth. When first seen patient was salivated.

Wasserman and Naguchi tests reaction negative.

November 23, 1910, O. 5gm. Salvarsan Intra-muscularly. Alt method. Weight 132 pounds. Left hospital December 3, 1910, the day the second photos were taken. Condition much improved.

Fig 2.



Case No 1. 10 days after injection.

December 20, 1910, weight increased to 140 pounds. Wassermann and Naguchi negative.

February 2d, 1911, weight 145 pounds, ulcers in mouth and lip gone; eruption on cheeks reduced to faint discoloration of the skin.

March 7, 1911, Wasserman and Naguchi negative. Weight 148 pounds. Much improved in every way. Some pain still in the buttocks on stooping or bending.

Remarks:—In this case we have a man with persistent extenrnal lesions which resisted all forms of mercury and iodides. These lesions responded immediately to the "salvarsan," and the improvement has continued for four months with a gain in weight of 16 pounds.

Case 2. W. S. (Reported in the Iter-State Medical Journal, January, 1911.) Primary infection in May, 1910. Macular roseola changed to pustules and resisted all forms of treatment. Large syphilitic lesion on large toe.

Conditions since report was published: patient has left town but reports by mail

Fig 3.

Case No. 2 W. S. Immediately before injection.

that he is feeling well and has gained considerable weight. The skin is clear and the nail of the large toe has returned to its normal condition, as shown by picture.

Fig 4.

Case W. S. No 2. 12 days after injection.

Case 3. L. I., age 25. (Not shown by pictures here.) Chancre of upper lip, 6 weeks duration. Lesion is hard and typical and bleeds easily. Wasserman and Naguchi reaction. (Two tests.) Strongly positive.

Received O. 6gm. Salvarsan Intra-muscularly February 14, 1911. Discharged from hospital February 24, 1911 a photo taken then shows an utter absence of the initial lesion. Up to present date, March 12, there has been no sign of recurrence.

Case 4. J. B., aged 23, ulcer on right leg, duration 7 months. Has been treated on and off for seven years for syphilis. Recently has had injections of mercury without effect.

Fig 5.

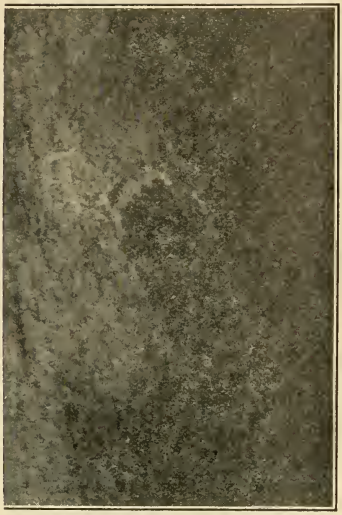
Case No 4. J. B. Just before injection.

January 21, condition as follows:—

Deep ulcer about an inch in diameter and one quarter inch in depth, (Fig. 1), Wasserman and Naguchi reaction positive. January 23, 1911, received 06 gm. Salvarsan intramuscularly. Alt method. Slight amount of pain. Left hospital February 2, 1911. Ulcer completely filled in with new granulations.

Since then improvement has been steady and continuous.

Fig 5.



Case No 4. J. B. ten days after injection.

Now, I present you a single case for your observation. Owing to the nature and opprobium of the malady I failed to induce any other to appear before the society. Guided by the observations mentioned, I have, with the exception of one instance, used oil suspension hypodermically in doses ranging from O. 3gm. to O. 6gm. In the case before you I introduced O 4gm. below the left scapula on the 7th day of March. The local chancre was then very hard, very painful and very extensive, involving both sides of the prepuce downward in two wide, angry indurated ulcers, joining underneath at the frenum. The inguinal glands were quite large, hard and also very painful, particularly on the left. The patient was depressed and feverish. Six days after the injection pain had modified materially. The gland indurations were considerably less and much softer. However, suppuration seemed to have increased and new granulations started and pain recurred off and on, but general health was greatly improved. There was a considerable lump at the point of injection in the shape of a traverse ridge, following the course where I had inserted the needle. Today, you can see his condition for yourself. He exhibits reduction in the breadth of the lesion on the left of the penis, softening of the induration around that point, very marked reduction in size and hardness of the inguinal glands and decided improvement in appetite and strength. Now, however, there remains local tenderness. I bring this case to you chiefly because it has been, in my observation, the least responsive to "606" in similar conditions at about the same dosage. However, the case is unquestionably improving after a single dose, which was too small.

Now, having mentioned formulas and the technique of injections briefly, and having referred those interested to text books, it may not be amiss to give opinions reached personally by actual trials as well as by observations and the study of reports of numerous injections made in many countries.

To begin with, I may state that at present, the intravenous injection is alleged the speediest to act, and if properly performed, is perhaps the least painful; but considering the very delicate chemical technique involved, and the great volume of material to be introduced into the venous system (about seven fluid ounces for women and over ten for men) and the possibility of unknown contraindications as well as the idiosyncrasies pointed out by Ehrlich himself, it is perhaps the most risky. It is also probably the most risky on account of the imperfections yet remaining in the construction of the armamentarium for the operation. However, the trouble here is being rapidly eliminated. The gravity apparatus of Weintraud, which I here show you, and that of Boehm with a double supply tube, recently invented in St. Louis, are bringing down the mechanism of intravenous injection to considerably more safety and ease.

Doubtless the intravenous injection apparatuses shall steadily be improved further in the course of time and under the stimulus of accumulated experience. Already different operators, as just suggested, change things in instruments and in technique to suit themselves and their views. For instance, the Weintraud trocar which I here show you, was blunt when I got it. I transformed it into a sharp pointed instrument, as you see, and thus after opening the skin I am relieved of the necessity of cutting into a shifting and often elusive vein with a scalpel before entering its lumen with the blunt trocar, and thereby I feel that I reduced the danger of producing a thrombus and lesion of grave nature by the oozing of "606" around the vein and in the skin at the point of injection.

There is need too, by the way, of technical improvement to steady shifting veins when attempting to enter a venous lumen. This struck me as needed to make the introduction of a trocar or needle into a vein easy and safe, and it was brought to my mind after seeing very painful ordeals suffered by patients and surgeons, in two different high class educational eastern clinics, during the efforts of competent surgeons to insert a trocar or hypodermic needle into a vein to deliver "606" into the system. The veins in these cases, though swelled out as whipcords, would shift from side to side; the surgeons were perspiring and embarrassed. The patients were ner-

vous, in pain and anxiety; and after repeated incisions (not made under anesthesia) to get into the vein, the locality presented a distressing, swollen, bloody appearance which was not without some dangers.

In conclusion, permit one word on the Wesserman and other diagnostic tests as part of personal opinion. You will see from Wolbarst's cases, that at least in two instances these measures were negative and yet both responded to the "Salvarsan" and therefore there was presumably syphilis. We may well ask then, if it is always necessary to go to the expense of these tests when in doubt, particularly in cases where no one can pay the fee. For my part, while I can see the merits of those tests, and would always, when at all possible, avail myself of them, I think it cheaper and perhaps that it will be found as useful and as proper so far as preliminary diagnosis is concerned to use "Salvarsan" at once. If it is syphilis you have to deal with, you shall find out from the result of the injection, and any way, no harm is done. In any event, in the majority of cases in practice, the history as well as the objective and subjective symptoms, are usually sufficient to establish a fairly reliable diagnosis; barring the difficulties to decipher the differences between syphilides, tuberculides and certain cancerous conditions of the skin, it is not improbable that "Salvarsan" alone will be found to serve as a diagnostic measure in doubted syphilis quite as reliable as tuberculine in tuberculosis—a preparation which is both a diagnostic agent and a remedy.

After injection, however, to be sure whether syphilis still remains or not, the test is generally of unquestionable utility.

Pritchard, Karl Reynolds, Green, Calloway,

The paper was discussed interestingly and instructively by Drs. Meriweather, Dunn, Pritchard, Karl Reynolds, Green, Calloway Briggs and Elias, each of whom added information and suggestions of importance as regards the general merits of the new remedy and in their special work.

Skin Diseases.—From his observations on the use of Bier's suction cups in the treatment of acne, acne rosacea, alopecia areata, chilblain, eczema, keloid, lupus vulgaris, milium, scars, seborrhea, sycosis, syphilis cers and urticaria, the author has been led to conclude that practically all chronic forms of skin disease are benefited by the hyperemic treatment before applying local remedies. The hyperemia probably acts in two ways : (1) through the passive congestion produced it increases the blood supply, thereby improving the nutrition of the part and at the same time encouraging the removal of deleterious products ; (2) it assists in the local action of the drugs when they are afterward applied.

In carrying out the treatment, exhaustion was applied for repeated periods of about five minutes' duration with three-minute intervals. Usually 2 to 5 applications were made at each seance, but no sitting was continued for more than an hour or repeated more than once a day. From the nature of the lesions, most of the patients did not suffer any pain or even inconvenience. A much greater degree of local congestion could be utilized than is possible or desirable in the treatment of inflammatory lesions such as boils or abscesses.

The best results appeared to be obtained in psoriasis, especially in some old-standing cases with very chronic and localized lesions, e. g., lesions limited to the knees or elbows. Some cases of lupus vulgaris showed rapid improvement, more prompt and satisfactory than X-ray treatment. Cases of acne, diffuse and local, reacted well, but required a considerably greater amount of congestion and more frequently repeated treatment, both general to a large affected area and afterward local to the individual more persistent comedones and pustules.

An immediate result of the treatment was, through congestion of the skin, increase the activity of the sweat-glands. In some conditions only an almost imperceptible amount of sweating resulted,—enough to cause a slight hariness on the sides of the cupping glass without a visible sweat on the skin. In others, such as many eczemas and seborrheas, a profuse perspiration was quickly produced. In others, again, the ordinary sweat was replaced by a serous exudation. In some cases of nonulcerated lupus, which as a class perspired freely under the treatment, a blood-stained serum exuded after a short time. For this reason the cases require to be very carefully treated and only for short periods at a time, one minute or so being usully sufficient.—Sibley in The London Medical Lancet.

Deforming Fibrinous Osteitis With Osteomalacia.

Salazar de Souza (Arch de med. des enf.,) refers to fibrinous osteitis and mentions a case observed by him in the person of a boy born healthy and having had no sickness until the age of eighteen months. He had no symptoms or rickets. He fractured the left thigh three times between the age of eighteen months and seven years. Up to this time he had walked well and the fractures had healed easily. The thighs now began to bend gradually; the bones of the head face and thorax underwent changes. The

pelvis became deformed, having a triangular form. The intelligence of the patinet was of a low order. The diagnosis of this condition is not easy. It must be differentiated from rickets; this is done by the history, by the different type of pelvic deformity, and by the evolution of the malady. In achondroplasia there are micromelia, large diaphyses and voluminous head with small face. In this patient there was hypertrophy instead of atrophy of the face, with a bending of the diaphyses. The bones of the head are thickened. The beginning of the disease was very early, but progressive. The three symptoms of osteomalacia existed; softening, deformity, and multiple fractures. The pelvic deformity, as shown by radiography, was of the osteomalacic type. There was diffuse hypertrophy of the bones of the head and face and base of the skull. The eyes were wider apart than normal, due to diffuse periostitis of the craniofacial bones. A process of periosteal hyperplasia and condensing osteitis went on at the same time with fibrous medullitis and rarefying osteitis. Therapy can effect little in such cases; the deformities will go on increasing, and involving more and more the bones of the throax, and death will very likely come about the intercurrent respiratory diseases.

New Observations on the Thymus and their Bearing on Children's Diseases.

Klose (Arch. f Kinderheil,) has clinically experimentally and biologically investigated the thymus gland. The Dr. gives a historical review of our knowledge of the function of this gland. Its mechanical influence on respiration is undoubted. Hematomata in the thymus have an important effect on the trachea. They may be due to syphilis or to birth injuries. There have been cases of death from thymus swelling in narcosis, in infections, etc. A hyperplastic thymus may compress the esopagus, hindering swallowing and nutrition. It may cause constant or sudden dyspnea; it may kill by pressure on the vascular system in the upper portion of the chest. Percussion and radiography assist in locating the prolongations of the thymus and determining its shape and size. A diagnosis of thymus stenosis may be made from physical signs alone, on the ground of symptoms confined to the deeper organs of the neck, such as sudden attacks of dyspnea with swelling of the jugular veins. The symptoms occur during the first year of life, often appearing immediately after birth. Radiotherapy has been attempted, but its use is dangerous since we can never know the extent of the involution that the rays will cause, even to the entire destruction of the gland. Intubation and tracheotomy have not given good results. The author has made a series of experimental operations on dogs. The thymus was removed and the operated and control animals were kept together and observed. Partial extirpation of the thymus had no effect at all on these animals. The best time for operation on dogs was found to be the tenth day after birth. Extirpation resulted in changes in the bones, nervous system and nutrition. A cachexia thymipriva was caused, the animal becoming idiotic and dying in coma. The bones became smaller, porous, and fractured easily. When broken they healed with difficulty. There was shortening and atrophy of the bones. The lime salts were lessened in amount. The thymus seems to be an organ that has for one of its functions the hindering of production of acids in the organism, or the neutralization of an excess of acid that has been produced. Being nuclein-rich it holds a place in the synthesis of nucleins. A nuclein acid poisoning, oxypathy, causes in young animals a form of rickets, weakness, increase in growth in bones, osteomalacia, and osteoporosis, with abnormal friability. The brain is increased in size and swollen; the ganglion cells are swollen, enlarged, and deeply stained with increase of protoplasm and changes in the nuclei. The perivascular spaces are increased. The symptoms of the animals deprived of thymus remind us of tetanus in children. The blood is not changed in the anmials operated on. The only treatment that promises to be of value in these conditions is the surgical.

Argyll-Robertson Sign in Cerebral and Spinal Syphilis.

Glark (British Medical Journal)says that the Argyll-Robertson phenomenon is to be regarded as an example of the selective action of a poison upon the central nervous system, inasmuch as a special group of neurons having a definite and restricted function is picked out and put out of action. So far as the author's cases go, they entirely support the contention that this sign is not a symptom found in pure cerebro-spinal syphilis, and that its presence is an ixdex of a degenerative process at work in the nervous system. The contrast with tabes and general paralysis, in which the sign is present in about 70 per cent, or over of the cases, is too striking to call for further remark. The author refers throughout to the fully developed Argyll-Robertson sign only, because merely sluggish pupils, although in certain connections suggestive, have not the same clinical significance. Further, it is now certain that in recent cases and under efficient mercurial treatment an absent light reflex may sometimes be regained. There are one or two other conditions under which the Argyll-Robertson sign may be present, but the associated symptoms should prevent an error in diagnosis. Thus the sign is present in cysts of the third ventricle and in tumors of the optic thalamus extending to the corpora quadrigemina. It has also been noted in lesions of the corpora quadrigemina, but it does not invariably accompany them. It is also present in optic atrophy, but not in optic neutritis.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

Eugenics.

It requires something more than a mediocre mind to impassionately contemplate the past, the present, and the future, and anything that tends to cause a man to extend his intellectual horizon has its intrinsic value. As engenics has its root in the past, its activities in the present and its hopes in the future, it must be largely idealistic, even though it be defined as: the science relating to the development of race. While the science, if a science it may be, is yet young, its legitimacy and usefulness as such is already questioned; and this is well, for engenics partakes of so many of the sciencies and its principles are so idealistic that it would appear to be the goal of all the sciences rather than a science itself. In the abstract it directs our attention to high ideals and confines our day dreams to human needs and possibilities; thus, like religion, it is compatible with any high calling, and any man who is interested in the weal of his neighbor and nation is in line with its principles. In the concrete it embraces all the sciences and differs in no wise from them. And, as all the sciences lead to the welfare of man, those fragments of knowledge which constitute the science of medicine are indispensable to the "science" of engenics; thus engenics appears to knock at the doctor's door with unusual forcefulness. For this reason the doctor should at least examine its credentials, and while to him it may be "old wine in new bottles," it seems wise that he interpose no obstacle to the propagation of its tenets. In fact, as the principles of engenics are in accord with the principles of medicine, it would seem proper to facilitate the introduction of the subject, even as a science, among the people; for in its name, the doctor may meet the people on common ground and discuss such matters as heredity, hygiene, sanitation and the conservation of public health. Evidently these medical subjects are also the basis of engenics.

To be well born is the legitimate heritage of all, and as the improvement of the race depends upon the development of its progenitors—those who are, and those who are to be, it is plain that until some decided changes occur in our laws regarding marital relations, all that can be done in the way of race improvement is the presentation of the laws that govern reproduction, to those who are legally qualified to marry; the physical improvement of those already married; and the proper care and development of the young. If children were properly developed, physically and mentally, their children would be well born and the race would evolve uninterruptedly. As the matter stands in civilized nations, today, children are but the by-product of inherent and acquired lasciviousness. And were it not for maternal love, infants would perish like weeds by the way-side. It is the mother's love that brings the child, often, to a frail maturity; and in it is ignorance and greed that sacrifices it to commerce, industry and war, without a thought for the perpetuation of the race.

Eugenics, as we understand it, demands that the father be strong and healthy; the mother well cared for; and the children well fed and properly developed. Then, whether it be a science, or an ideal depending upon the other sciences for its realization, its purpose is most worthy and should receive our earnest support.

Fortunately, under various names, public health is being conserved; the rights of women and children are being recognized; and clean politics and the "square deal" are demanded. As these things are realized the race will develop and improve. Where children go hungry, worn and perverted, that nation must vanish and history will repeat itself; and the tribes, yet unborn, will hear the cry—Oh civilization, where is thy pride.

The Scientific Age.

Without doubt this is the most interesting period in the history of man; humanity is passing from the age of faith and tradition into the age of science and progmatism. Altruism is taking the place of egotism; laws of equity are superseding properly right; men rather than oracle are taking the center of the stage. We are learning to live here and now. The past has been a sort of humdrum follow-the-leader existence. The present is a game of hide-and-seek, of research, test-tubes, experiments and records. Men fly in the air and live in the sea. We measure with the micrometer and view with high-power lenses. Faries and demons, alike, are passing, cosmic forces are now recognized as that which is. It is not strange if terror is manifested by the timid, and warnings are shouted by those who have not seen the light. The strain and stress we feel is but the creaking and groaning of progress. Religion, science and philosophy are being unified; fraud and graft are giving away to the "square deal;" greed is being routed from high places. Healthy brains are being valued as the greatest asset. All spiritual progress depends upon brain evolution, and all natural progress depends up healthy brains. Healthy brains cannot be had without healthy bodies and wholesome ideas. As these simple facts are more fully appreciated, the physician and teacher who understand the needs of brain tissue will be recognized as the backbone of all human progress. In a natural state evolution progresses uninterrupt-

edly, but in the presence of the artificialities of civilization, knowledge is power. And the knowledge of brain, its development and preservation is the knowledge that controls the lives of men and the destiny of nations.

Perhaps the saddest page in human history is the premature failure of noble brains. For ages we have been told that "as a man thinketh so is he," and now we must recognize the fact that a man thinketh according to the condition of his brain. It is the physicians duty, pre-eminently, to know the brain, its needs and its disorders; the brain should be made the basis of medical knowledge, the anatomy and physiology of man are but subservient to the brain. When this fact is appreciated by the body of physicians the doctor will come into his own; all encroaching cults and isms will be exposed in all their grotesqueness, and the science of medicine will verify the adage—the study of man, is man.

One of the most deplorable situations in medicine today is the fact that many physicians are wholly ignorant of the substance which creates and sustains medical poachers; most, if not all sects and isms have a nucleus of truth as their basis, and, as one swallow does not make a summer, one therapeutic fact does not constitute the science of medicine. It should be the business of wide-awake medical organizations to investigate every claim of poachers, and in society meetings report and record the results of such investigation. If fraud is found expose it. And, when new truths are discovered, demonstrate them, accept them, and give the discoverer whether physicians or layman, his just reward. Truth is the private property of no man, but the man who accepts truth from any source, is the man best able to guide men in health and care for them in sickness. Not before the physician is able to develop and care for his own brain will he be qualified to properly guide those who place themselves in his care; nor will he conquer the approbrium—physician heal thyself.

GASTROGENIC DIARRHEA.

Gastrogenic diarrhea is a condition in which a perversity in the gastric secretion or interference in the motility of the stomach is the etiologic factor. Many cases of stomach disorder manifest themselves by symptoms suggesting intestinal disease. This has been frequently proved during the last ten years by an examination of the stomach contents, showing abnormal secretion or an interference with motility. We may have all degrees of decreased secretion of gastric juice or the direct opposite may be the case showing a hyperchlorhydria. Both conditions may or may not be associated with atony and interference with motility. An examination of the feces after a test-diet shows that the food stuff is inadequately digested. On account of some perversity in the secretion of gastric juice, food undergoes fermentation or putrefaction, and an undigested mass is emptied into the duodenum. The mucous membrane of the duodenum unaccustomed to receive a decomposed mass is irritated and this induces a diarrhea.

It was at first believed that the cause of gastrogenic diarrhea was to be looked for in the absence of the antiseptic action of the hydrochloric acid in the stomach. But hydrochloric acid is not the all determining factor in preventing processes of decomposition in the intestine, as can be seen from the many patients with achylia who do not complain of intestinal disturbances; and besides, we see frequently strong decomposition in the stomach itself where hydrochloric acid is present. There is no doubt that the origin of these fermentations in the stomach is due to disturbances of the motor activity, and is of greater significance than disturbances of the chemic processes. Gastrogenic diarrhea with atony and normal acid secretion must be due to the passing over of special putrefactive elements from the stomach into the intestines. It some cases, by examination, we can find these elements directly in the stomach and in the feces. In cases of insufficient gastric digestion, fermentation and putrefactive elements can easily establish themselves in the stomach, or pass through the stomach undestroyed and in this way produce secondary intestinal disturbance as a consequence. It is at once apparent that the burden of undigestible substances, as a result of primary gastric disturbance, cannot be a matter of indifference to the intestine.

ENTEROPTOSIS AND PREGNANCY.

Enteroptosis or Glenard's disease is often due to a complication of causes. Among these, repeated pregnancy is one of the very frequent for the reason that it produces a diminution in the tension of the abdominal wall. Rapid deliveries prsent a condition which favor this diminution and may superinduce enteroptosis. It is probably true that four-fifths of the cases of enteroptosis occur in women. Individuals who suffer from ptosis and become pregnant will have increased intra-abdominal pressure. This pressure will vary dlrectly as the uterus increases in volume. Pregnancy produces a marked improvement in the digestive functions in these cases and there is no reason why this improvement cannot be made permanent through proper treatment. This digestive betterment is especially noticeable in the latter months of pregnancy. We may hold, therefore, that normal pregnancy does not exert a bad influence on the ptosis. If, after delivery,

the viscera are sustained for sometime, a contraction of the abdominal wall takes place and in due time the organs will continue in position. While the uterus is pregnant and enlarges, the organs which are displaced are steadily forced up into their normal position and the stretched mesenteries thus have an opportunity to regain their tonicity. After delivery the abdominal wall recede holding the organs in a nearly normal position.

The dispensing with the abdominal bandage after pregnancy according to the new method of obstetricians predisposes to enteroptosis. Pregnancy favors and assists the cure of enteroptosis. Patients with enteroptosis need not, on its account, hesitate to become pregnant. Increased abdominal pressure relieves the disagreeable symptoms of enteroptosis. Keeping the patient in bed after delivery and applying an effective band is very helpful in the cure of enteroptosis. Early convalescence after delivery and insufficient support to the abdomen predispose the patient to enteroptosis.

HELP THE ASYLUM PHYSICIANS.

The difficulties which physicians working in state institutions for the insane meet with are not fully appreciated by other physicians and the public in general. This is more especially true concerning histories. The classificaton of mental disorders is by no means an easy matter, and a detailed life history of the patient is just as important as a reliable history in any ordinary physical disorder. Too often this cannot be obtained from the patient himself, and the ordinary papers brought with a patient are almost always totally inadequate in this regard. The relatives of the patient are apt to consider insanity as a disgrace and not a misfortune, and, therefore, are not disposed to co-operate. When intelligent relatives of a patient can be seen sufficient data may be obtained, but this is the exception and not the rule. The family physician occupies an important position in the matter and can do much to aid in a correct diagnosis by insisting on a history of the patient with full details.

In some Southern States, at least, when a patient is sent to a state institution more often that not a relative accompanies him, and the attending physician has no real information concerning his life. Until the patient has been under observation for some time only a cross-section view of the case can be had, and inasmuch as the symptoms shown may be common to several psychoses the matter of diagnosis is one of extreme difficulty. Even after the patient has been under observation long enough to arrive at a definite diagnosis the records cannot be made complete because the physician can not obtain information concerning the patient previous to admission. Moreover the symptoms shown at different times may varv greatly, as depression and exaltation in manio-depressive insanity. A composite picture is necessary, in order that the clinical work may be reduced to a sound basis The work of the Germans in psychiatry is perhaps unexcelled. They were among the foremost to recognize widely varying mental phases as symptoms of the same psychoses. This they were enabled to do by close study of the patient's entire life. Their facilities for doing this were much better than they are in many sections of this country. Most commendable progress has been made in the study of insanity. Let the physicians in private practice help in this important line of work, in order that the physicians in institutions for the insane may be enabled to do their work more thoroughly.

Synopsis of N. C. Hookworm Report For First Quarter, 1911.

John A. Farrell, M. D., Asst. Sec. for Hookwarm Disease.

Total number of active practitioners of medicine in State (Approx.)	1500
Ttotal number of doctors giving reports on hookworm disease	1153
Total number doctors giving reports on hookworm disease prior to January 1, 1911	874
Total number doctors reporting this quarter for first time	273
Total number doctors reporting this quarter	816
Total number doctors reporting having treated cases to date	549
Total number cases of hookworm disease reported treated by doctors prior to January 1, 1911	8326
Total number of cases of hookworm disease reported treated by doctors since January 1, 1911	9607
Total number of cases of hookworm disease reported treated by doctors (We estimate that 25,000 cases have been treated.)	17933
Total number of doctors asking this quarter for package of hookworm literature for distribution	517

No. speciments sent to liboratory of hygiene:	Examinations	Hookworm Infection.
First quarter, 1910	70	30
Second quarter, 1910	486	176
Third quarter, 1910	2421	944
Fourth quarter, 1910	4972	1651
First quarter, 1911	9045	3186
Total to date	16994	5178

Number of physicians uning laboratory for diagnosing disease prior to

January 1st, 1911	384
Number of physicians using laboratory for first time during this quarter	99
Total number of physicians using laboratory to date	483
Number of white schools inspected	266
Number of colored schools inspected	69
Total number of white and colored schools inspected	235
Number people (Approx.) informed about hookworm disease popular lectures	5956
Number of school children reached by talks and visits of District Directors of Sanitation	20,000
Appropriation from Legislature to co-operate in the campaign	$5,000

We are interested to note in this report, two points especially. The first is the hearty co-operation of the physicians as is indicated by the large number of cases that have been treated. The second is the splendid growth in the number of specimens of feces sent to the laboratory for examination since the work was begun.

Dr. Ferrell is evidently doing a very great work, a work that is favorably commented on, not only by the profession of North Carolina, but throughout the country.

North Carolina Medical College Commencement.

The evening of May 1, the graduating exercises of the North Carolina Medical College marked the close of one of the most successful years in the history of this institution. The exercises were held in the Academy of Music, of Charlotte, where a large audience of splendid personnel was assembled.

Dr. Albert Anderson, of Raleigh, N. C., was the speaker of the evening, and his address to the graduating class was one of interest and value to the young men.

In the course of his remarks Dr. Anderson spoke of having visited the laboratories of the North Carolina Medical College, and wasagreeably surprised to see the students enjoy many privileges which he did not have in his college days.

The closing event of the evening was the conferring of diplomas by Dr. W. O. Nisbet, Dean of the faculty, upon the following young physicians:

N. A. Andrews, Fairmont; G. S. Cox, Dothan; E. L. Dameron, Bessemer City; L. D. Floyd, Green Sea, S. C.; T. B. Gold, Lattimore; S. S. Hutchison, Covington; W. L. Jackson, Greensboro; A. H. Myers, North Wilkesboro; Oren Moore, Blacksburg S. C.; R. A. Moore, Rural Hall; A. M. McCuiston; Wallburg; T. E. Person, Fremont; J. L. Rauson, Charlotte; Colin Shaw, Mayesville; R. E. Stack, Colfax; J. W. Squires, Charlotte; W. C. Terry, Rockingham; H. L. Timmons, Sumter, S. C.; C. M. Trippe, Salamanca, N. Y.; W. E. Wishart, Charlotte; J. B. Whittington, East Bend; R. V. Yokley, Lexington.

Directors of the North Carolina State Society for the Feeble Minded.

This organization which was provided for by the recent legislature, organized and determined to proceed at once with the selection of a site and the erection of a $60,000 plant for which the State issues bonds.

The directors are Mr. J. Y. Joyner, superintendent of public instruction; Dr. L. B. Brayer, of Asheville; R. E. Austin, of Albemarle; Frank B. Hendren, of Wilkesboro; W. A. Thompson, of Aurora; Mark Majette, of Columbia; J. R. Baggett, of Lillington; Dr. I. M. Hardy, of Washington; Dr. A. A. Kent, of Lenoir, and R. N. Cartwright, of Fairfield.

The Central State Hospital of North Carolina.

The board of directors of the Central State Hospital for Insane has reorganized with Dr. R. H. Stancil of Margarettsville as chairman and Dr. J. D. Biggs, secretary. The executive committee was named, consisting of S. O. Middleton, E. G. Moore, Elm City, and S. G. Daniels, Littleton.

Titus County Medical Society of Texas.

At the annual meeting, held at Mount Pleasant on March 23, the following officers were elected for the ensuing year: President, Dr. A. A. Smith, Tally; Secretary, Dr. W. H. Blythe, Mount Pleasant.

Edgefield County Medical Society of S. C.

The following officers were elected at the annual meeting, held at Edgefield on March 29: President, Dr. Hunter of Trenton; Vice President, Dr. George Walker of Johnston; Secretary-Treasurer, Dr. John G. Edwards of Edgefield; Delegates to State Convention, Dr. R. A. Marsh and Dr. S. Morrall.

Florence County Medical Society of S. C.

At the annual meeting held in Florence on March 17, the following officers were elected: President, Dr. D. H. Smith; Vice President, Dr. R. P. Covington; Secretary, Dr. W. S. Lynch of Scranton.

Book Notices.

A Treatise on Diseases of the Nose, Throat and Ear. By William Lincoln Ballenger, M.D., Professor of Laryngology and Otology in the College of Physicians and Surgeons, Chicago. New (3d) edition, thoroughly revised. Octavo. 983 pages, with 506 engravings, mostly original, and 22 plates. Cloth, $5.50, net. Lea & Febiger, Philadelphia and New York, 1911.

This work has already attained a remarkable record of popularity. Three editions have been called for in less than three

years, and during part of this time it has been entirely out of print, owing to the unexpected rapidity of exhaustion. Sustained success is built on merit. Professor Ballenger started his book with adequate preparation. Regardless of labor, he added to his library some 3,000 monographs, pamphlets and reprints, by corresponding with colleagues in America and Europe. In this way he obtained the very latest literature, embracing the most advanced knowledge throughout the civilized world. With equal disregard of labor, he caused to be made under his direct supervision a series of drawings of such profusion that even the steps of operations were illustrated, so that his readers might master the technique at leisure. Moreover, he made his work completely comprehensive by covering both the medical and surgical treatment of the whole region of the nose, throat and ear. It is, in a word, a combined treatise and atlas. A book of such breadth, cosmopolitanism and high authority served equally for the instruction of students, the guidance of practitioners, and for specialists to post up to date. Hence the concentration of demand, which has given Dr. Ballenger frequent opportunities to revise the work and to keep it in the forefront of all the rich literature of its subjects. He has again improved such an opportuity to the full, and his readers will find in this new edition all recent advances of value and many new and characteristic illustrations.

Abstracts of the Leading articles of the month.

Assistance From the School Physicians in Infantile Paralysis.

Serena advocates the paying of especial attention by the school physicians to the orthopedic treatment of children who have recovered from infantile paralysis sufficiently to go to school. He thinks that it has been demonstrated that it is a mistake to wait for electric treatment in these cases until all the early symptoms have subsided. The electricity should be begun as soon as the health of the little patient will permit it. Massage and passive movements are also of value in these cases to preserve the integrity of the paralyzed muscles and to prevent contractures. After the case has in a measure lost its interest for the family physician, and the child has returned to school hampered by his disability, he is apt to go ahead mentally, while he is unable to take part in the games of his fellows, and precious time is lost and atrophy and contracture occur, which render it difficult to get a good result when surgical measures are undertaken. If the school physician would take pains to see that these cases are under good orthopedic treatment the benefit would be incalculable and we should have fewer candidates for the institutions for incurables.—Gazetta Medica di Roma.

Acromegaly as a Result of Fright.

Pel of Amsterdam (Berlin klin Mochen,) calls attention to this association in 1891. No one has reported any similar association during the 20 years elapsed. Now Pel has added two cases to his first one. The first of these latter began in a married woman aged 25, who was shocked mentally by a gas explosion. Menstruation was suppressed for 9 months and then was resumed sparingly and irregularly. Gradually the hands, feet and face began to enlarge. There was no change in the glandular organs, and the sexual apparatus became atrophied. The encephalon remained normal. Patient, although well, tired quickly. The x-ray showed enlargement of the sella turcia. There was no other evidence of pressure atrophy within the skull. The second case was in a woman aged 47, who complained of ready fatigue, general exhaustibility, affections of the psyche and vision, and enlargement of hands, feet and face. Some 16 years before, while pregnant, patient was violently alarmed by a fire. Gestation not interrupted, no anomalies of puerperium or lactation. After the lactation period, the disease in question made its appearance. A climacteric resulted. The subject complained of pains in the head and face, arms, legs, hands, feet and face. Vision was affected. In a few months acromegaly was apparent. At the present time, 10 years later, there was marked muscular weakness, including the heart—the picture of muscular hypotonia. The teeth are separated from one another. The spine is a state of kyphosocoliosis. Patient has periodical epileptic attacks, or rather epileptiform attacks, beginning in the right arm or facialis, but becoming general and typical. The pupilae of the eye were pale; the usual acuity and field of vision were much reduced. Hemianopsia was absent. These symptoms could be explained by a pressure on both opticus roots before the chiasm. The internal organs showed no anomalies. The sexual atrophy was marked in the highest degree. The headaches were one sided and in fact represented a sort of migraine. Rontgen investigation showed a marked dilatation of the sella turcica.

Acute Atony of the Stomach.

Schlesinger (Berliner klin Wochen,) refers to what is commonly known as acute dilatation. At least he hardly emplays the latter term in his article, although it is conceivable that a normal stomach may be acutely distended. He discusses entirely what is known as the postoperative atony or dilatation. One such case was relieved by placing patient in the Trendelenburg position and using a stomach tube for drainage. Half a pail of water came away which possessed a distinctly feculent odor. In such a case the possibility of an occlusion of the

small intestine must be taken into account. A study of the patient showed that the fecal odor was not constantly present. Intense atony of the stomach could occur without the latter—for the patient underwent the same gastric crisis, it is necessary to assume the existence of some shutoff arrangement which may or may not be present at a given time. The arrangement which occludes the upper part of the intestine, must be a temporary reflex, else fecal matter could not enter the stomach. The problems involved must necessarily be difficult. The existence of acute atony or dilatation has even been denied. Autopsy records show that in many cases a kinking of the intestine above the duodeno-jejunal juncture may be found in operative cases. Other records purport to show a pyloric occlusive condition. Tandan sought to show that these occlusions could be prevented by the Trendelenburg position during operation. The mechanism in such cases was not sufficiently in evidence. In other cases as cited by Haberer, the occlusion was pathological and permanent. In other words nothing has transpired to prove the necessary occurrence of gastric atony after operation. To attack the problem from another point of view—towit, the prophylactic—Kocher washes out the stomach before all gallstone operations. The author would improve upon this procedure by adding the Trendelenberg position in all operations. The importance of the problem is shown by the great activity in experimental lines, as suggested by the foregoing. It seemed quite impossible to imitate the conditions of acute gastric atony in man.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physican should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Treatment of Leukemia.

Sternberg, of course, dwells most on radiography, which is so efficacious in certain leukemic cases, yet fails outright in others. It would appear that the rays should be exhibited under conditions not yet understood, in order to be efficacious. Arsenic has also been similarly exhibited in leukemia and its congeners (pseudolenkemia and lymphosarcoma), with the same irregularity in results. Leukemia patients frequently suffer from gastroinestinal anomalies, which may naturally be offset by proper treatment. Some leukemias under arsenic medication often exhibited phenomena due to arsenic alone; the latter have to be combated else they will be set down to the disease itself. This is more the case in the overaction of arsenic plus that of x-rays. The special symptoms of arsenical poisoning include herpes zoster and obstinate dermatitis of the mouth. Arsenical neuritis with paralysis of nerves is common. Beyond this mark arsenicism is not to be expected, and such results may be antagonized by an antiarsenical regiment. In conclusion the author would push the x-rays; using arsenic as a reservation measure. The ill effects of the latter should be supplemented or offset by a course of radioactive mineral waters, sunbaths, etc. Special complications such as nosebleed, should be treated by the most approved remedies (cocaine, adrenalin . Radiography is always indicated.

Mr. Abraham Flexner and the Carnegie Foundation.

It is unfortunate indeed that Mr. Andrew Carnegie should be handicapped in his good work by so inaccurate and untruthful a lieutenant as Mr. Abraham Flexner (not the scientific physician, Simon Flexner) has shown himself to be in his report on Medical Schools, as furnished to the Carnegie Foundation.

The general attitude of this layman observer (sic) is characterized by flippancy and contempt; it is most unworthy and unsuitable in one whose duties in an investigation of the sort undertaken require a mind in the highest degree unbiased and judicial. And this attitude taken by Mr. Flexner has led him to present a report so full of errors and actual falsehood that its effect will be almost surely to arouse serious antagonism in the minds of the very men—those actively engaged in medical teaching—from whom a movement for the betterment of medical education must receive its most valuable support; thus such a report as that of Mr. Flexner, instead of being an aid to Mr. Carnegie, in his unegotistical and self-effacing philanthropic plans, is really furnishing an obstacle against their fulfillment.

There are a goodly number of people who wonder why Mr. Carnegie is "butting in" anyway. Why has he assumed that it is his royal prerogative to decide what are the best methods of medical teaching, and where and in what manner these methods shall be carried out?

The munificence of Mr. Carnegie has al-

ready made it possible for the opulent working man, during his leisure hours following a brief period of toying with rolling mills and blast furnaces, to hie himself to a Carnegie Library, where he may satisfy the craving of his eager mind for literature, history and art.

Incidentally, of course, Mr. Carnegie has provided a means for insuring that his name will be before the public for a few brief years after his bones are dust; perhaps not for so long a time as will be remembered the names of the discoverer of the circulation of the blood, the pioneer of bacteriology, the discoverer of vaccination or of the patient scientist who brought forth the X-ray, probably none of whom had the advantage of six salaried-full-time-laboratory instructors, or of the marvelous benefits to be derived from a projectiscope! But every little library helps!

We should be thankful that so wise, broadminded, and fair, a man as Henry S. Prichett is President of the Carnegie Foundation; the work and influence of such a man will go far to neutralize the ill-advised bungling of others.

I have said that Mr. Flexner's report is characterized by an attitude of flippancy, contempt and untruth. Here are a few quotations from the report:

"* * * **so long as a man is to practice medicine the public is equally concerned in his right preparation for that profession, whatever he calls himself—Allopath, Homeopath, Eclectic, Osteopath, or what not.**' It is not possible to determine Mr. Flexner's classification of the bulk of the medical profession; they certainly would not allow themselves to be called Allopaths (and in using the term Mr. Flexner shows his ignorance of the whole medical situation) so he must call them "what-nots"!

"* * * **very seldom, under existing conditions, does a patient receive the best aid which it is possible to give him in the present state of medicine.** *

"* * * **a vast army of men is admitted to the practice of medicine who are untrained in sciences fundamental to the profession and quite without a sufficient acquaintance with disease.**" ! ! !

On page 113—"**Hospital and Medical School**"—is the statement regarding hospitals, "**mainly relied on by** * * * * * **Denver and Gross (Denver)** * * * * * there is no clinical laboratory at all. ..*..*.. **there is no equipment to make a culture, and the internes are rarely equal to it anyway.**" It is very evident that Mr. Flexner did not investigate this matter, for if he had, he would have found a complete bacteriological laboratory and internes capable of using it. A member of the Advisory Board of the County Hospital is authority for the statement that this laboratory was installed several years ago, and is kept up and used and was so at the time of the Flexner "investigation."

The June Bulletin of the Illinois State Board of Health says: "Mr. Flexner, according to his own published itinerary, inspected thirty-four schools in six different states (Colorado, Illinois, Iowa, Missouri, Nebraska and Utah) in thirty days—in the month of April, 1909, in which there were four Sundays. That is going some, if we may be pardoned the colloquialism. Yet this is what the Carnegie Foundation is pleased to term a **careful** personal inspection."

On page 116, "* * * **In Denver, students 'are not much at the bedside; they just look on'; the hours are from 8:30 to 10 a. m., daily—the early hour having been fixed, it is alleged, to prevent the attendance of the State University boys at Boulder.**" Boulder is one hour from Denver by trolley; what better arrangement could have been made?

In the report of the "investigation" of the Denver and Gross College of Medicine, are the following interesting statements:

"**Entrance requirement: Less than high school graduation, loosely enforced.**" It is a fact that some students have been received without their presenting the actual ink-smeared-on-paper document, but the requirement which the school advertised—the equivalent of a four-year high school course—was adhered to and close scrutiny made of credentials. Instead of a loose enforcement, Denver and Gross has at times been perhaps over-strict in the matter of entrance requirement, as certain individuals rejected by Denver and Gross have been received by the State School, and I do not understand that Mr. Flexner or any one else accuses them of laxity.

"**Teaching staff: * * none of them giving their whole time to teaching.**" The professor of chemistry did nothing but teach.

"**Laboratory facilities: * * * a dissecting room ,containing a few subjects dry as leather.**" At the time of the Flexner "investigation," final examinations were in progress and dissection had ceased. Hhe must have seen the debris which was about to be removed. He evidently did not see the lower vapor storage room well stocked with surplus subjects.

"**There is a total absence of scientific activity.**" Well! for pure, unadulterated cussedness, raw malice, and percolated von om, that unfounded, and uncalled-for, gratitous insult should surely win a prize! anywhere! Is it possible to conjecture how Mr. Flexner could get teh data on which to base that statement, as the result of an hour's investigation at a time when the work of the year was over, an "investigation" made under following circumstances: No warning of his visit was given to the officers of the school so that they could arrange their time so as to accompany him: he did, however, notify, by letter and by telegram, the officers of the State School of the hour of his arrival, in ample time. He "blew into" Denver at the early morning after his investigation of the State School the day before,

at an hour when the secretary of the Denver and Gross was engaged in a surgical operation at one of the hospitals, and the dean of the school (myself) just starting out on an inspection of the dairies of the city (and we found a lot of very dangerous ones, too.) I had never heard of Mr. Flexner and didn't know of his importance in the world, or if he was a prophet, or a son of a prophet, or a son of anything else. It didn't occur to me that my labors in behalf of a pure milk supply for the city (total absence of scientific activity, I suppose!) ought to be subordinated to acting as guide to this individual, who couldn't wait a few hours, and whose chief anxiety in our brief talk seemed to be concerned with the amount of our income. To make a long story short, I went on the dairy investigation, and he went to the college building (accompanied by the dean of the State School of Medicine and a professor of surgery of the same institution) for an "investigation lasting, as I am informed, about an hour. Both of the men who accompanied him are gentlemen, and I am proud to call them my friends, but what could they tell him as to the details of our school? And how could Mr. Flexner report of our laboratories when the scientific apparatus was even then going into storage for the summer? In fact, during a five minutes' talk I had with him, he seemed to have a set of notes ready prepared.

"A few cases of books are found in the college office behind the counter." Yes, there were. There were over two thousand carefully selected volumes in those cases in a safe place behind the counter, over which books were passed to students who wished them. That library was not a collection of old medical junk, such as is seen in some libraries, either. And there was also a circulating library for use of students at their homes. And there was a reading room with twenty-five medical journals on file, too. He speaks nicely of the dispensary building, but feels in duty bound to state that the records are not kept in a manner agreeable to him. A laymen ought to be a gooodoo ooo himo. A layoman ought to be a good judge of dispensary notes! He might have mentioned the fact that the eyeclinic was the best and largest college eye-clinic in the United States; also that the obstetric clinic has furnished yearly at least ten cases for each individual senior student.

"* * * post-mortems rare." About 100 a year was all. But then, out West, the hospital staff gives some attention to therapeutics as well as to dead-house teaching; and a fair proportion of county hospital patients are permitted to re-

The above quotations are a sample of the accuracy of this "investigation," as far as by own knowledge goes. I wonder if the rest were like this one?

Those interested in medical education in Colorado have always been in sympathy and co-operation with every movement designed to better medical education.

We all recognize the fac that there are many medical schools undeserving of life. We know that scientific medicine is advancing and that the deserving schools must progress also; that the laboratory and scientific side of medical teaching must be given more and more fully.

But whether or not trust methods can be successfully applied to medical education is another question.

It may be true that a few large schools with a staff of exclusively laboratory men will give us better physicians than smaller schools (which can just as well adhere to high entrance requirements and quality of instruction.)

It may be quite possible, however, that there is something to be said for the smaller institution, not so heavily endowed perhaps, and not able to afford full-time laboratory teachers; it is quite possibly an advantage to have a school so small that teachers are brought into close personal relation with students, and where laboratory men will have a practical side to their lives and work.

The advancement of medical teaching is a worthy, greatly-to-be-desired, and most necessary object. But it is unfortunate that in the attainment of a desirable end, gross injustice should be done to earnest and unselfish men who have labored without recompense in the field of medical education, by having their efforts flouted and hypercriticized in a contemptous monner by a pseudo-investigator such as Mr. Flexner must be.

This article is written by the signer of it, and not by the request or consent of the Denver and Gross Medical School; the members of that organization, it may be said, in closing, are heartily in accord with the aims of the Carnegie Foundation in so far as they relate to the advancement of medical education; they are the men who long ago consolidated the Medical Department of the University of Denver with the Denver and Gross and the State School, and now that this about to be realized, are ready to give the new school their hearty support and full co-operation.—Editorial in Denver Medical Times.

The Examination of the Stomach by Means of Bismuth Capsules.

Cohn (Berl. klin. Wochenschr) says that celodurat capsules are gelatin capsules treated by means of formaldehyde and are entirely insoluble in the gastric contents. The writer has the patient swallow two such capsules, one filled with one gram of bismuth, the other partly filled with half the amount. The former promptly sinks to the bottom of the stomach contents, while the latter, being ligher, floats on top. When such a patient is examined eadioscopically, the two capsules can be distinctly made out.

Excision of Strictures of the Urethra.

Groves (Bristol Medico-Chirurgical Journal) brings forward the results in a series of six cases of this operation, describes the details of the method, and points out the advantages that it possesses over dililatation and urethrotomy. The first debatable point concerns the necessity for a suprapubic opening of the bladder. Thomson Walker strongly advises it, and although the writer has never adopted this plan, he will use it in future in cases with cystitis, and also in every case in which an instrument cannot be passed through the stricture. The patient is placed in the lithotomy position, and a metal bougie held in the urethra and kept accurately in the middle line of the body. A median incision is made in the perineum which stops short one inch in front of the anus. A curved transverse cut is then made almost from one ischial tuberosity to the other, coming forward to meet the posterior end of the first incision. This shaped opening allows three flaps of skin to be turned back. In the area thus exposed are seen the ejaculator urinæ muscle in front and the transversus perinei behind, the former covering the corpus spongiosum, and the latter marking the posterior limits of the dense triangular ligament. The ejaculator muscle is divided in the mid line and its two halves turned outwards. In recommending this as a separate step of the operation the writer has the following reasons: The muscle can subsequently be united as a distinct layer over the seat of anastomosis, and the urethra will be more accurately exposed if the layers covering it are divided one by one, just as the trachea is exposed in the operation of tracheotomy. Now comes the cardinal point in the operation, the scientific reason for which was first pointed out by Goldmann. The excision, suturing, and anastomosis must involve the whole thickness of the spongy body, and not consist in an attempt to deal with the urethra inside the tissues of the corpus spongiosum. The advantages of this are obvious, because whilst it is impossible to mobilise the urethra inside the spongy body to more than a very slight extent, the corpus spongiosum itself can be mobilised to almost any extent. The spongy body is richly supplied with blood by vessels which enter it at both ends, so that it may be freely divided and a section of any length removed without endangering its nutrition. In fact the only limit to the length of spongy body and urethra which can be removed is the disproportion produced between the lengths of the spongy and cavernous bodies. If this is too great, a downward bend will be given to the penis when in a state of erection. Goldmann noted this occurrence after excising a stricture 3¼ inches long, and the writer has experienced it in a case of about 1½ inches. But as all the tissues of the penis are eminently elastic, this matter very soon rights itself. The great majority of strictures lie close against the triangular ligament, and one can always rely upon finding the urethra deep to the triangular ligament dilated and thickened. This part is defined, and after the stricture has been excised it is united to the corpus spongiosum in front, the latter having been freely raised from its bed. The union is effected over a rubber catheter by two tiers of fine interrupted catgut sutures, the inner grasping the wall of the urethra, and the outer fibrous sheath of the spongy body. The muscular and cutaneous layers are separately sewn up, and a short drain is left at the junction of the two limbs of the latter. The catheter is securely tied in its place and connected with a receptacle at the side of the bed. Both drainage tube and catheter are removed at the end of three days, but the catheter is reinserted and changed on alternate days until the tenth day. The writer believes that it is only because the anatomical possibility and the clinical success of the excision of urethrol strictures is not yet realised that it has not yet been adopted as the routine treatment of all cases not suitable for dilation.

The Weight of Evidence.

If professional endorsement of the therapeutic efficacy of a remedy by men of recognized reputation, further supported by a successful existence of over a quarter of a century counts for anything, it must then be logical to presume that such a product is worthy of a trial in conditions where it is clinically indicated

No greater an authority upon Gynecological Diseases than Sims could be quoted, and from the fact that he prescribed and recommended the use of Hayden's Viburnum Compound in certain Gynecological and Obstretical conditions, is weighty evidence of its therapeutic efficiency and reputation which it enjoyed with the older members in the profession.

That it has continued to serve as a satisfactory remedy since the time of Sims, in the treatment of Dysmenorrhea, Menorrhagia, Threatened Abortion. Rigid Os, etc., its increasing popularity with the profession indicates which should warrant it worthy of a trial in these diseases, when they are presented to you.

To those physicians not familiar with the genuine H. V. C., as originated by Dr. Wm. R. Hayden, a sample with formula

and literature will be forwarded upon request to the New York Pharmaceutical Co. Bedford Springs, Bedford, Mass.

Indications for Artificial Termination of Pregnancy.

One of the most important indications for interrupting pregnancy is hyperemeris gravidarum. A certain degree of vomiting during pregnancy is physiological and requires no treatment. On the whole, occasion for interference will not be frequent, thus, Hammerschlag could cure 17 out of 19 cases by means of diet, drugs and rest. Among heart diseases, mitral stenosis and myocarditis are often serious complications of pregnancy and may demand interference when decompensation cannot be rapidly corrected. It is often advisable later to remove the ovaries so as to prevent subsequent pregnancy is exactly the same as under ordinary conditions Tuberculosis develops rarely during pregnancy; in the majority of cases, a latent process becomes evident. Tuberculosis is an extremely grave disease for the pregnent woman, for not only does the disease rapidly progress but the respiratory and muscular exertions accompanying the labor pains are apt to force infected matter into healthy portions of the lung and the general increase of blood-pressure will favor pulmonary hemorrhage. Involvement of the larynx it particularly dangerous. In a small percentage of cases where the best care is possible, the patient may be tided over the dangerous period, but she must be constantly under the control of a physician. Interruption of pregnancy is not indicated in the third stage of the disease as no improvement is to be expected, nor is it so often in place during the second half of pregnancy in any case of tuberculosis, since here the artificial termination is frequently as dangerous to the patient as the natural termination. A nephritis of pregnancy frequently causes no trouble and disappears after gestation is ended, provided all toxic influences are carefully avoided and the patient keeps to a strict diet. If uremic symptoms appear, energetic treatment may be tried, but should eve symptoms supervene, no more time should be wasted. A transition of this type into chronic nephritis is exceptional. If the patient already suffers from chronic disturbances of renal secretion, severe symptoms are apt to develop early during gestation and the womb must be emptied early. An acute nephritis appearing during pregnancy may run the same course as under ordinary conditions. Pyelitis is usually amenable to treatment and only rarely requires interference. A pregnant woman with diabetes must be carefully watched, and if the sugar increases and acetnoe appears despite the dieting, pregnancy should be terminated. In some cases the disease remains stationary, so that the presence of sugar alone does not necessarily signify much. Chorea of pregnancy may be of two tydes: in one the onset is slow and the cure usually rapid with isolation, diet and the administration of diuretics, diaphoretics and nerve-tonics. In the other, much more severe type, the onset is acute and rapid interference may be the only cure.—Berl. klin. Woch.

Idiopathic Acidosis in Children.

Sharp (Brit. Jour. Children's Diseases) says that all cases should be treated as serious till the contrary is proved. Give a saline purgative mixture made up as follows: heavy carbonate of magnesium, 36 gr.; bicarbonate of sudium, 24 gr.; powdered tragacanth 3 gr.; glycerin 2 fluid drachms; water or peppermint water to 3 fluid ounces. Dose: two teaspoonfuls every one or two hours with or without plain water or aerated soda-water. As much alkali as possible ought to be given, and 10 grains of sodium bicarbonate in a tumblerful of aerated soda-water should be given frequently. If vomiting is so persistent that the patient gets no rest, the following mixture ought to be prescribed every hour till the child gets sleep or rest; tincture of opium, one minim; compound tincture of cardamoms, 10 minims; glycerin, 10 minims; and water to one fluid drachm.

Carbohydrates and Thyroid Extract.

Mayerle (Zeitschr. f. klin. Med.) says that in the administration of thyroid extract, symptoms of intoxication may arise rather suddenly, especially when the dosage is increased. These toxic manifestations are due to a greatly increased proteid metabolism and fat combustion. He has found that the administration of large quantities of carbohydrates, in conditions of artificial hyperthyroidism, results in a diminished proteid destruction without interfering perceptibly with the increased fat combustion. As this is exactly the state of things ordinarily desired when thyroid extract is administered, he concludes that the diet of such patients should contain not only sufficient proteid, but also as large an amount of carbohydrate as possible.

The Treatment of Residual Urine.

Miller (Edinburgh Medical Journal) recalls a suggestion which he first made more than ten years ago for the benefit of those with commencing symptoms of enlarging prostate. By perseverance he thinks the bladder can be trained in the art of expelling residual urine, whereby the catheter life may be avoided or postponed for a long

time. After passing all the urine he tells that he conveniently can, the patient is instructed to wait two or three minutes and then to try to pass some more. If as much as an ounce is expelled, this is proof that there is some residual urine in the bladder. At first the second effort should be made at every act of micturition, except during the course of the night. After a while it will be found that twice a day will suffice—first thing in the morning and last thing at night. In some cases, after a while the residual urine ceases to exist, so effectively does the bladder learn the art of emptying itself; in others it is reduced to a drachm or two; in others the effect is limited to prevention of its increase. But always greater comfort is obtained, and the unpleasant night rising is diminished, if not abolished. Since first publishing the idea the author has received many testimonials from medical men of its usefulness, and has also proved on his own person the possibility of avoiding a threatened catheter-existence.

The Treatment of Yaws with "606."

Strong (Philippine Journal of Science) records the histories of 25 cases of yaws treated by Ehrlich's dioxydiamidoarsenobenzol. The Dr. says that the drug forms an ideal specific for these diseases. Three or four days after its injection the granulomatoas lesions begin to fade and in the course of from ten to twenty days they usually have disappeared entirely. Tumour masses measuring several centimetres in diameter and about a centimetre in thickness are absorbed in a short space of time, and under the influence of no local treatment whatever. The disappearance of such lesions and the cures produced are, to the writer's mind, nothing short of marvellous. Even where large granulomatous masses or deep ulcerations existed, these were healed within two to four weeks. A slight reddening appears about the margins of the lesions 24 to 48 hours after the injection of the preparation. The centre of the lesion then usually assumes a purplish or bluish congested appearance. Where crusts exist these frequently are not absorbed, but drop off. None of the cases treated have shown any sigans of relapse, although they received but a single injection; over four months have elapsed since most of them were inoculated. In severe instances of the disease and where the ulcerations are extensive and of long standing the Doctor believes that a second inoculation given about three weeks after the first one may be advisable. The Dr. concludes from his observations that dioxydiamidoarsenobenzol is as important a specific for yaws as quinine is for malaria.

Iodides in high Blood Pressure.

Matthew (Edinburg Medical Journal) has printed a most useful and practical research in regard to the effect of iodides in reducing high blood pressure and the comparative values of various organic iodine compounds which are extensively advertised as proprietary products by various enterprising Continental and American firms of manufacturing druggists. He begins by recounting the unsatisfactory results following the use of nitrites, benzoates, hippurates, diuretins, thyroid extract, mercurials, Truneck's serum and other reputed remedies for hypertension; all these he tried without permanent benefit, except that mercurials sometimes did good by removing the source of an intestinal toxæmia. The rationale of the undoubted effect of iodides in reducing blood pressure has been much debated. Romberg, and afterwards Mulles, thought it to be solely due to diminished viscosity of the blood. Huchard ascribed it to vaso-dilatation; Janeway, to an action on the vessel walls. Rolleston holds that the effect is due to a stimulation of the internal secretion of the throid gland. The author concludes that iodides have a specific action in cases of high blood-pressure before arterio-sclerosis has set in, but that they have no effect when once the latter condition is well established. The vaso-dilatation is, he thinks, exactly similar in kind to that of intrites, but slower in onset and much more prolonged. This action of the iodides is useful in the earlier stages of chronic nephritis, for so-called idiopathic high blood-pressure, and for so-called idiopathic high blood-pressure, and for aneurism.

Anaphylactic Attacks After Serum Injections.

Allard reports two striking cases, both of which occurred in physicians after the prophylactic administration of serum. The first case was that of Prof S., 34 years old, into whose face a virulent culture of anthrax bacillus had been accidentally sprayed. He was given an injection of 10 cc. of anthrax serum just below the right costal border. The serum had been obtained from sheep's blood. About a quarter of an hour after the injection he felt a sudden access of blood to the head, with marked sensation of head and pains in the head; the face became cyanotic and quite edematous; breathing was rapid, the pulse good, temperature slightly raised. A quarter of an hour later the first symptoms disappeared, to be replaced by striking pallor and coldness of the face and extremities, without sweating. There was now also pain at the site of injection; but the most striking symptom was dyspnea accompanied by a feeling of dis-

tress, which in a recliaing posture increased to a sensation of choking. When Allard saw the patient the body was pale, the face and extremities ice cold, the pulse small but regular and 110 to the minute, the second heart sound much accentuated and ringing, breathing 50 to 60 to the minute, unequal and interrupted by irregular short pauses, and the point of injection surrounded by a red and swollen area larger than the palm of the hand. Plenty of strong coffee (there was nothing else at hand) produced marked improvement after twenty minutes, and the next day the patient felt well. It transpired that Prof. S. had seven years previously been injected for diphtheria with horse serum without untoward results; and five and a half years previously for angina with horse serum, the injection on this occasion being followed by neuralgic and myalgic pains and albuminuria. Eighteen months previously he had received injections of rabbits' spinal cord as protection against rabies, and had subsequently felt very miserable and had lost in body weight. In the second case, Dr. W. received a prophylactic dose of 10 cc. of antitetanic horse serum. Four or five hours later the patient had a sudden attack of nausea and dizziness, with facial pallor, accompanied by urticarial blisters on the left arm, and pain, redness, and swelling at the site of injection. The general symptoms were of brief duration, but the disturbance in the left arm increased for several days. The latter then disappeared, and the same or next day there was a sudden urticarial eruption on the left forearm, lasting for a half-hour only, but repeated frequently in the same location and for a like brief duration during the next few days and nights. A week after the injection during the night, after several transitory urticarial outbreaks on the left forearm, a general urticaria developed over the whole body, with intolerable itching. Immediately after the patient had a sudden attack of diarrhea, and while evacuating the bowel was obliged to vomit and felt dyspneic; he at once noticed that the urticaria had disappeared. An hour and a half later the general urticaria was repeated, and at its height occurred dysphagia, with a feeling of the neck being with a cord, an attack of coughing, and burning pains in the tracheal region. The urticaria again suddenly disappeared. Allard saw the patient at this time, when he presented extreme general pallor, an edema of the extremities, impalpable pulse, heartbeat 150-160 to the minute, and irregular breathing with long apneic pauses. After several more attacks of urticaria and diarrhea, the treatment followed be subcutaneous injection of camphor and caffein, the patients, condition gradually improved. This patient had also on former occasions received two injections of horse serum, the first time without untoward results, the second followed by the delopment of urticaria and disturbance of the heart's action. The author explains the two cases on the basis of anaphylaxis, in the first case probably congenital against sheep's serum, and in the second acquired horse serum.—Berl. Klin. Woch.

Radiumtherapy in Bleeding Fibroids of the Uterus.

Dr. Cheron, one of the authors of the paper above epitomised, has also written on radiumtherapy in bleeding uterine fibroids (La gynecologie, ann. xiv. pp 415-424, 1910). Using Domenici's far-penetrating radiation by means of radium (le rayonnement ultra-penetrant du radium de Domenici,) he has obtained good results. In a typical case, viz. a small interstitial fibroid in the anteverted uterus of a woman not yet near the menopause, Dr. Cheron employs a Domenici tube (one allowing the passage of only *B* (hard) and *Y* rays, by reason of filtration through 5-10 of silver) containing sulphate of radium; this is introduced into the cervical canal, its upper end not going beyond the isthmus, but in quite exceptional cases it may be placed inside the body of the organ. To obtain rapid hæmostasis 05 gr. of pure sulphate of radium is left in position for from 6 to 8 hours, and this procedure is repeated about 12 times, with intervals of 2 or 3 days. The action may be supplemented by flat appliances placed on the abdominal wall, and containing about the same quantity of the radium salt, the rays of which have to pass through a filter of 2 mms. of lead. Slight variations in the technique are made for dealing with fibroids in a retroverted uterus, with subperitoneal fibroids, with large inoperable ones, and with cases in which the cervix is so sclerosed that the tube cannot be passed in. The results of the treatment have been twofold. The checking of the bleeding in small fibroids is easily effected, two months sufficing, and Dr. Cheron obtained such a result even in cases which had been previously repeatedly curetted with no success. In some cases the menopause was established, and in others there was simply a checking of the menorrhagia. There was always difficulty in obtaining hæmostasis in the large fibroid uterus. The second result is diminution in size of the growth, and as the radium rays do not appear to influence fibrous tissue directly it must be regarded as due to the effect on the vessels. The decrease in size, therefore, is delayed. The indications for

using radiumtherapy in uterine fibroids are thus grouped by Cheron: (1) In the case of serious accidents which necessitate rapid hœmostasis, e. g. women suffering from bleeding fibroids in whom surgical interference is contra-indicated on account of grave anæmia or cardiac or renal disease; and (2) in patients whose fibroids do not call for surgical interference, or at any rate, do not require hysterectomy or myomectomy. If radiumtherapy be properly used it has no dangers—indeed there would be no justification in recommending it if it had any. The risks of excessive reaction, resulting in vaginal or intra-uterine radiumdermitis are small if the Domenici tube is properly surrounded with tarlatan to prevent secondary radiation.—Edenburgh Medical Journal,

Tumors.

Tumors have been cultivated outside of the body by Drs. Alexis Carrel and Montrose T. Burrows, of the Rockfellow Institute for Medical Research, in New York, and they believe that the methods which they have pursued will be a valuable addition to the means of studying the problem of cancer.

They have already reported to the medicinal profession that tissues can be made to grow outside of the body. The purpose of the experiment was to develop a general method which would permit a study of the tumor tissue under known conditions and to observe living cancer at every instance of their growth.

It was found that the growth of the tissue was very rapid. At the end of 24 hours the surface of one of the new tissues was found to be sixteen times that of the original fragment. The sarcamtous cells were cultivated in series so that every step in their progress could be determined. Technical analysis of investigations day by day, using foul sarcoma which had been propagated fer more than a year as the basis of their experiments.

The resulls showed that sarcomatous tissue grows luxuriantly outside of the organism; that a second generation can be produced by the cells grown in the first culture, and that the whole process can be observed wtth ease at every instance of its evolution. It is probable that the malignant tumors of the human organism can in a similar manner be caused to grow outside of the body. The method, therefore will be a valuable addition to our means of studying the problem of cancer.—Courier Record of Medicine.

State Board of Medical Examiners. Wisconsin Board of Medical Examiners.

January 10 to 12, 1911.

PATHOLOGY; HISTOLOGY, BACTERIOLOGY.

1. Name the degenerative or retrogressive processes and describe the microscopic appearance of two of them.

2. Name the causes of infarction and give the pathology of their termination.

3. Give the causes of arteriosclerosis and the pathological histology of same.

4. How many and what are the varieties of cirrhosis of the liver?

Give etiology of each, and describe the pathological histology of one variety.

5. Give etiology of tuberculosis, discuss sources of contagion and route of entrance to the tissues of the body. Describe a typical tubercle.

6. Give causes of endocarditis and describe the pathological histology of endocardial vegetations.

7. Name the organs of the body most prone to cancer in order of the frequency of their involvement. Classify the tumors of epithelial origin.

8. What is anemia? Give varieties, differentiate lymphatic leukemia and splenomedullary leukemia.

9. What diseases due to bacteia show a bacteriemia?

Give the pathology of typhoid fever.

10. How would you prove that bacteria cause disease.

11. Give the normal histology of the skin.

12. Give the normal histology of a nerve, a muscle, an artery.

ANATOMY.

1. Describe the fifth cranial nerve.

2. Describe the femoral vein.

3. Describe the fourth ventricle, and where is it located?

5. Give the boundaries of the axillary space, and name its contents.

6. Describe the abdomen, and name its contents.

7. Describe the pancreas.

8. Describe the biceps and triceps muscles.

PEDIATRICS.

1. Differentiate spasmodic laryngitis and membranous croup, and give treatment of the latter.

2. Give three causes of convulsions in children, and treatment.

3. Describe fully the general management of a case of scarlet fever.

4. Differentiate catarrhal lobar pneumonia.

PRINCIPLES AND PRACTICE.

1. Give the diagnosis of typhoid fever.

2. Name six organic diseases of the heart and give the physical signs in three of them.

3' Give the treatment of acute and chronic bronchitis.

4. Give the diagnosis and treatment of enterocolitis in children.

5. Give differential diagnosis of smallpox and chicken-pox.

6. Give diagnosis of tabes dorsalis.

7. What are the complications of acute articular rheumatism and what are the best means of preventing them?

8, Give diagnosis and treatment of acute labor pneumonia in the first stage.

MATERIA MEDICA AND THERAPEUTICS.

1. Give physiological actions and uses of strychnine.

2. Name five preparations of mercury with the doses of each.

3. Give the physiological actions of ergot.

4. Give treatment of poisoning by carbolic acid.

5. What do you consider the safest general anesthetic and what is your method of its administration?

6. Give the first signs of danger in giving a general anesthetic?

7. Give means of resuscitation in threatened death from anesthesia.

PHYSIOLOGY, OPHTHALMOLOGY AND LARYNGOLOGY.

1. Describe the genvous mechanism of muscular contraction.

2. What is food? Classify and give functions.

3. Differentiate between serous, mucous, and synovial membranes. Tell where each is found.

4. How is asphyxia produced? What are the causes of death from asphyxia?

5. Describe the physiology of hearing.

6. Name the organs of elimination and tell what is eliminated by each.

7. Give the distribution and function of the third and fifth cranial nerves.

8. Define respiration, its purpose and how accomplished. Define a reflex arc.

9. Give cause, diagnosis and treatment of corneal ulcer.

10. What is choked disc? Give most important cause end treatment.

11. Diagnose and give treatment for foreign bodies in the larynx.

12. Give etiology and diognosis of atrophic rhinitis. How is it cured?

OBRTETRICS.

1. At what time during pregnancy is an abortion most dangerous? Describe the management of such a case.

2. Give etiology and treatment of pernicious vomiting of pregnancy.

3. What symptoms during pregnancy would cause you to fear postpartum hemorrhage, and what treatment would you use to prevent its occurrence?

4. What treatment would you use to prevent toxemia of pregnancy?

5. Give diagnosis and management of breech presentation and cause of fetal mortality incident to same.

6. What are the indications for the use of forceps? Give rule for applying them.

7. If the conditions were such that you feared laceration of the cervix, what means would you use to prevent the same?

8. State fully your treatment of puerperal convulsions during and after labor.

GYNECOLOGY.

1. Give symptoms and treatment of cervical endometritis.

2. Name the ligaments that hold the uterus in position and give attachments of same.

3. Name the number of and different places at which a pelvic abscess may "point."

4. Give general outline of treatment for disturbances and disorders incident to the menepaus.

SURGERY.

1. Name and define the three most important principles of practice in present-day surgery.

2. Name and define anesthetics in the order of srequency used, and give contra-indications for use of each.

3. Give diagnosis and treatment of a ruptured male urethra.

4. Give indications for tracheotomy in the order of frequency required, and define the operation.

5. Give diagnosis and treatment of a ruptured appendix vermiformis.

6. Give diagnosis and treatment of a cholecystitis with obstruction,

7. Give treatment for fracture of both bones of the forearm at or near their middle.

8. Give treatment for dislocation of outer end of clavicle.

PHYSICAL DIAGNOSIS.

1. Give the physical signs of lobular pneumonia.

2. Give physical signs of empyema of chest.

3. Give physical signs of cardiac dilatation.

HYGIENE.

1. Give amount of fresh air space necessary to each individual in the sick room.

2. Give amount of excrement exhaled

from lungs and excreted from the skin in twenty-four hours and the best methods of disposal.

NEUROLOGY, MEDICAL JURISPRUDENCE AND DIETETICS.

1. Name all the nerves that would be severed in an amputation of the arm, at the junction of the middle with the upper third.

2. Give origin, distribution and function of any one of the cranial nerves, and name its formation of exit from the skull.

3. Name and locate the principal parts of the primary divisions of the cerebro-spinal nervous system.

4. (a) What is the "Romberg symptom?"

(b) Name and descrtbe the various stages of the disease in which it occurs.

5. Give the nerve supply of the stomach, liver, spleen, and diaphragm.

6. In a case of supposed infanticide, what post-mortem signs would determine whether the babe was born dead or alive?

7. Can a physician be held liable to a charity patient, in case malpractice is proven against him?

8. Can a master, who calls a physician to attend to a servant in his employ, be held for the physician's fee?

9. What is the advantage of toast over ordinary bread in certain gastric disturbances?

10. What conssitutes good drinking water?

11. At about what age would you begin to feed a child farinaceous foods?

12. Name the foods which may be permitted, and those which should be forbidden in the treatment of diabetes mellitus.

Some Additional Uses of K-Y Lubricating Jelly.

In addition to the qualities that have given to K-Y Lubricating Jelly its great popularity as a surgical lubricant, it has been found to possess emollient, soothing and healing properties that make it invaluable for an exceptionally wide variety of other uses.

The following are among the most important of the conditions in which it has been employed with conspicuous success:

1st. For relieving the pruritus due to diabetes or uremic conditions. K-Y is soothing and markedly anti-pruritic in these distressing complications and its liberal use is invariable followed by the most gratifying relief.

2nd. For chafing and pruritus caused by leucorrheal or periodic discharges. K-Y liberally to the affected area promptly allays the irritation and almost always affords immediate relief.

3rd. For properly caring for the skin during and following measles and scarlet fever. Many physicians make a practice of anointing the bodies of their measles and scarlet fever patients from head to foot with K-Y; in this way they afford gratifying relief from itching and effectively prevent dissemination of infectious material.

K-Y has many othey uses—in addition to the foregoing and its regular employment for lubricating catheters; rectal tubes, specula, etc.,—which will be suggested by its notable cleanliness, its water-solubility and its freedom from greasiness. It means everything to the physician as well as to the patient that it never stains, discolors or soils the bedding, clothing, dressings or wearing apparel.

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Proper Medication and Cheerful Company.

During the past two months, we have met with more lagrippe than anything else, and the number of cases in which the pulmonary and bronchial organs have been very slightly or not at all involved, has been greater than we have noted in former invasions. On the contrary, grippal neuralgia, rheumatism, and hepatitis have been of far greater frequency, while the nervous system has also been most seriously depressed.

With each succeeding vissitation of this trouble we have found it more necessary to watch out for the disease in disguise, and to treat these abnormal manifestations; consequently we have relied upon mild nerve sedatives, anodynes and tonics rather than upon any specific line of treatment. Most cases will improve by being made to rest in bed and encouraging skin and kidney action, with possibly minute doses of blue pill of calomel. We have fonud much benefit from the use of antikamnia & salol tablets, two every three hours in the stage of pyrexia and muscular painfulness, and later on, when there was fever and bronchial cough and expectoration, from an antikamnia and codeine tablet every three hours. Throughout the attack and after its intensity is over, the patient will require nerve and vascular tonics and reconstructives for some time. In addition to these therapeutic agents, the mental condition plays an important part, and the practitioner must not lose sight of its value, Cheerful company, change of scene and pleasant occupation are all not only helpful, but actually

ecessary in curing the patient.

Spermatorrhea and Impotence Due to Disease of the Prostate.

Porosz, (Berliner klinische Wochenschrift) says that, although our knowledge of the anatomy, physiology and pathology of the prostate has made great strides in the past ten years, many physicians still ignore the fact that disease of the prostate is often responsible for spermatorrhoea and impotence. We know that an acute, or a chronic prostatitis, is often followed by disturbances yf the sexual function. These patients rapidly develop into neurasthenics. In all these there is a disturbance in the sexual mechanism. What this disturbance was, was not known until recently. The Dr. says that the vesicles as well as the bladder must have a sphincter. There is an analogy between the bladder and the vesicles, in that both serve as reservoirs for a secretion which is constantly manufactured, but is emptied only from time to time. The spermatic spincier is not directly a structure belonging to the vesicles. It is a bundle of muscular fibre belonging to the prostate, which serves to close the ducts of the vesicles. It is this bundle of muscle which is responsible for all those functional disturbances which have for a long time been regarded as evidences of central nervous lesions. Pollutions, are therefore, the result of a weakness of the spincter of the viscles. Spermatorrhea is also the result of the same cause. In cases of atony of the sphincter the prostate is found soft, boggy, objectively atonic. In all these cases there is an anatomic cause for the neurasthenic symytoms and the latter are not primarily of nervous origin, as was supposed by many physicians.

Modern Treatment of Tuberculosis.

Gray (Transvaal Med Journal), says when discussing the question of climate following Trudeau, that though pure air is the essential thing it must be dry to be of the utmost benefit; and that the region selected be free both from cold winds and from too hot sunshine—the winds leading to dyspnœa and the heat to haemoptysis. In regard to rest and graduated exercise it is enjoined that patients with a rise of temperature of 99° F. have rest, if above 100.5 F, absolute rest. until the fever falls. As labour is gently increased the patient is able gradually to undertake more without any reaction, the theory being that the exercise engenders a homologous and therefore preferable auto-inoculation in the tissues in the same manner as a foreign strain of extraneous tuberculin induces a merely analogous auto-inoculation within the system. Severe reactions must of course, be avoided. The writer thinks highly of Koch's New Tuberculin, T. R., as a curative agent in early phthisis pulmonalis. The initial dose is 1 | 2000 of a milligramme of solid substance for adults, one-tenth of this for infants, and one-fourth of this for older children. Small doses are given every week or two weeks. It having been shown by Inman that the opsonic index varies inversely as the temperature, it follows that the temperature is a very good guide in the use of the tuberculin. Therefore it is harmful to go on with a stated dose if the fever rises, the disease extends, or fever falls too markedly. Until these symptoms are abated no increase of dose is to be entertained. Treatment should be continued for three months and the dose ought never to exceed 1-20th milligramme of solid substance. The author wisely reminds us that tuberculin is always to be looked upon as an aid to other treatment. However, he considers it of benefit in tuberculosis of bones and joints, of the eye, peritoneum, genito-urinary tract, early lymphatic glands, and of the larynx. A short note on the last named malady states that great benefit was obtained in one case by the inducing of a congestive flush round the larynx by a small pad placed in the hollow between the cricoid and sternum, and kept in position by a band round the neck. P. T. R. may be more beneficial in peritonitis, half of the cases according to Weber being of bovine origin. As regards feeding for deficiency of HCl and resulting flatulent dyspepsia the author recommends raw meat and raw eggs, with solid dry meals and alcohol. Intestinal decomposition is combated with milk and bccillus lactis, and chalk given every two hours—no other food. Milk, sometimes inhibiting gastric secretion, is better given between meals. Paterson's graduated exercise chart is appended.

Relation of Theory of Action of Tuberculin and the Therapy of Tuberculin.

In the course of a lengthy and somewhat technical article on the differing views of bacteriologists on this question. A. Wolff-Eisner thus states his own judgment: Tuberculin is not a toxin, but an endotoxin. By tuberculin therapy one can increase the bacteriolysins and in time bind tuberculin to local receptors. Hence are derived the indications of tuberculin therapy. Local reactions are two edged and therapeutically must be avoided. The absence of tuberculin reactions after prolonged tuberculin treatment does not rest on immunity in the sense of the development of antitoxins, but on the binding of the binding of the tuberculin to new-formed, still sessile receptors, far from the central nervous system and the

focus of disease. Sahli is quoted as recommending an absolute avoidance of all reactions.—Berl Klin. Woch.

Chronic Gastric Ulcers.

Bolton recognizes four pathological conditions of chronic gastric ulcers: Primary acute gastric ulcer, which is well known to be produced in several ways. Such ulcers run through the same stages as experimental ulcers do and heal in from three to four weeks, depending upon the size and depth of the ulcer. Multiple acute ulcers are liable to lead to some contraction of the stomach. These ulcers commonly produce no symptom unless a vessel is accidentally opened up leading to hemorrhage, or the ulcer perforate. When the vessel which has been opened up is not occluded by a clot, or when the clot has broken down and the hemorrhage is repeated, the ulcer may completely heal except for a hole in the centre leading into the vessel. On the other hand; their presence may be associated with an attack of gastric pain and vomiting, which, however, is never so severe as in the chronic form or the disease. Such acute ulcers are liable to occur at intervals in the same patient. In the absence of any obvious bacterial or other infection, which are known causes of this malady, a careful search should be made for a local source of infection such as pyorrhœa alveolaris, chronic appendicitis, suppuration of the sinuses, vaginal discharge, and so on. 2. Primary acute gastric ulcer with delayed healing (subacute gastric ulcer). The delay is brought about largely owing to motor insufficiency of the stomach, leading to necrosis of the granulation tissue of the base and excessive fibrosis of the same. Cicatrization is seen at the edges of the ulcer, which are quite smooth The base is smooth and filling up, but active digestion in the centre may go on while cicatrization is proceeding and give rise to hemorrhage late in the course of the disease. Considerable scarring of the stomach may result. The clinical history extends over a longer period and the symptoms are more pronounced than in acute ulcer, which heals in the usual time. 3. Chronic gastric ulcer. This ulcer is characterized by the absence of signs of tendency to heal, and also by its gradual extension. The base is usually thickened and excavated in the centre and the edges may be overhanging owing to digestion of the connective tissue under them. Whether this ulcer arises by a further process of delay so that the healing is completely stopped, in which case digestion of the base necessarily follows, must remain for the future to decide. 4. Secondary acute ulceration. Exactly how a chronic ulcer extends is a very interesting and important question. It may be that by acute exacerbations affecting the surrounding mucous membrane more or less extensively a chronic ulcer gradually increases in size. It may also increase in other ways. —The London Practitioner.

Anaemia and Respiratory Trouble,

Hofbauer in the Wiener Medizinische Wochenschrift, discusses the cause of respiratory disturbances in conditions of anæmia. The writers attention was drawn to the subject by a patient who, together with severe anæmia, showed signs of considerable respiratory trouble, although there was no evidence either during life or at the autopsy, apart from the anæmia, to account for this condition. By experiments on animals he is led to the conclusion that this sort of respiratory disturbance is not due to the anæmia itself, as is generally supposed, but to the attendant low blood-pressure. If an acute anœmia is produced in an animal by a sudden severe loss of blood, a change in the respiratory disturbance does not show itself. He further confirmed this hypothesis, that the respiratory disturbance was due to a fall in the blood pressure. The Dr. found that if an animal was bled severely by opening the aorta below the diaphragm the respiratory disturbance at once appeared, but as soon as the fall of blood pressure was stopped by ligature of the aorta, respiration returned to the normal type. In rabbits a similar respiratory disturbance can be produced without loss of blood by excitation of the depressor nerve and consequent fall of blood pressure. As soon as the excitation ceases, the blood pressure rises and the respiration returns to normal.

Treatment of Morphinomania by the "Combined" Method.

Miller: (British Medical Journal) says that in general terms this treatment consists of the administration of sodium bromide in large doses plus hypnotism, morphine at the same time being exhibited in gradually diminishing doses. The patient is treated in a nursing home. For three days the patient receives injections of morphine in diminishing doses, and before each injection he has to take a draught of 5 grams (80 grains) of sodium bromide. On the third day the morphine is administered per rectum. The total amount of sodium bromide for three days should total about 100 grammes. The bromide and morphine are then stopped. By this time he will be in a comatose or semi-comatose condition which will last for from three to six days more. As soon as the patient appears to be suffi-

ciently sensible, treatment by suggestion should be commenced and rigorously carried out. Any concomitant symptoms must be suitably treated. The author finds that sparteiene is the best cardiac tonic and he recommends ichthyol to prevent symptoms of bromism. Alkalies may be necessary to mitigate the hyperchlorhydria that is usually present, and possibly a stimulant expectorant to minimise the risk of pulmonary œdema. The Dr. further gives a brief survey of some of the modern methods of treating drug habits. The writer maintains that there are three primary requisites in any system of cure for morphinomania: (1) It should be painless or as nearly so as possible; (2) it must be calculated to obliterate the craving completely and absolutely for a time, however brief; (3) it must be specially designed to re-educate the will. He thinks these are adequately carried out by the treatment advocated.

Hysterectomy in Puerperal Sepsis.

Schickele (Beitrage zur Geburtshilfe and Gynakalogie,) says that the paramount question is whether the puerperal septic process is limited to the uterus or not. The only way to learn how to recognize these cases, the author affirms, is to examine the uterus after its removal and compare the anatomic changes with the preceding clinical course in every case without fail, striving to obtain premises for certain general conclusions. At necropsies also the anatomic findings in the uterus should be studied and compared with the record of the clinical course. The Dr. describes a number of typical cases from his own experience, which demonstrate, among other things, that severe puerperal infection may develop without the uterus itself becoming diseased. The pathogenic germs may penetrate through the intact uterus into the general circulation, and general symptoms of sepsis and metastasis are then the first signs of trouble. In this group of cases hysterectomy would be useless, as the uterus itself is not diseased. High fever for several days suggests a possible progressive inflammatory process inside the uterus, and this suspicion is strengthened by development of symptoms of peritonitis. The indications are especially urgent when there has been some preceding intrauterine intervention. The vicinity of the uterus should be free from infiltration, and there should be no signs of general infection for the indications in this class of cases to be beyond question. The third category includes the cases in which fever persists after some intrauterine procedure and soon afterward chills follow, or germs are found in the blood, or both occur together. In these cases the uterus should be removed without delay in the hope of forestalling general infection. If a few days have elapsed before the chills and sepsis develop, then the hysterectomy comes too late, especially if signs of metastasis have manifested themselves in the meanwhile. If the chills and sepsis do not follow the intrauterine intervention until after several days, with continuous fever in the interim, hysterectomy is indicated without delay in the hope that the mischief may be confined to the uterus, or at least that removal of the primary focus may bring relief. This applies also to cases in which the uterus has been injured. The trend of the times, he believes, is unmistakably toward operative treatment of puerperal fever. The general condition is the criterion in puerperal infection almost more than in any other circumstances. Most of of the various cases reported are instructive, because the necropsy findings are compared with the clinical records and clinical impressions, and the author urges others to do this at every opportunity as the best means to obtain light on this important subject of puerperal infection.

Vaccination Against Typhoid.

It has been very interesting to note the reports of different writers giving results obtained in inoculation against typhoid fever The difficulty of getting rid of typhoid fever, however much care being given to sanitation, the milk and water supply, etc. makes any method of prevention a most interesting subject. Protective inoculation against typhoid fever was instituted in the U. S. Army in March, 1909. According to Dr. Geo. B. Foster, Jr; (Jour. A. M. A.) 12,000 persons had been inoculated up to October, 1910. A complete vaccination consists of three inoculations at ten-day intervals. The vaccine is administered hypodermatically, giving 0. 5 cc. (5000,000,000 bacteria) as the initial dose, and a full cubic centimeter (1,000,000,000 bacteria) at each subsequent inoculation.

An illustration of the efficacy of the anti-typhoid vaccination is shown in an outbreak of typhoid fever at Washington Barracks, D. C. last summer, as given by By Dr. Foster. On June 14, ten days prior to leaving Washington Barracks for Gettysburg, 95 men received the first inoculation. On July 6, 52 of these men received the second inoculation, and on July 16, 51 received the third inoculation. Of the remaining 26 men of the command, a few refused vaccination and others were on detached duty or temporarily absent when the first inoculation was given. Two of the 26 un-inoculated men gave a history of having had typhoid and by virtue of

that fact may be considered immune. This leaves 24 men of the total strength of the 110 men who were unprotected. On August 11, five days after the troops returned from Gettysbury, two of the uninoculated men developed typhoid fever, and between August 20 and 23, four secondary cases occurred—also among the un-inoculated. Not a single case occurred among those who had received the preventive inoculations, while 25 per cent of the non-immune, living under exactly the same conditions, succumbed to infection.

Such figures as these, Dr. Foster concludes. are eloquent in calling attention to the practical application of anti typhoid in the prevention of typhoid fever.

The procedure is considered with certainty as safe, as three have been no serious results in over 31,000 inoculations. The immunity conferred seems to last for at least three years.

Dr. Gosman in an article in the Journal of the American Medical Association, October, 1910, concludes as follows: "Now, therefore, considering all the data I have presented on the subject, it seems that the present status of these inoculations against typhoid fever is that they are valuable as a method of preventing the disease and are perhaps the most valuable single asset we have in combating an epidemic, and that there is surely no doubt in the minds of most thinking and up to date medical men that they should be used in the following classes of persons. First, all nurses, ward attendants, hospital corps men, Red Cross assistants, physicians and medical students, also all persons who comtemplate a journey into a section where typhoid is known to exist or is suspected of existing; also, the inoculations should be done generally in districts suffering from an epidemic, and especially in the families where a case exists. * * *

"I am convinced of the harmlessness, and at the same time, of the effectiveness, of this procedure, and would recommend its universal adoption, to the end that our armies in time of peace and war, and our communities at all times may be kept as free as possible from that terrible epidemic disease, typhoid fever. And last, but not least, I believe I can state from a careful study and investigation of the matter, that the present status of anti-typhoid inoculation as a means prevention is assured, and that its future possibilities are great."

Anders says the value of vaccines in typhoid for the following purposes must be considered: (1) As a means of prophylaxis;(2)in suitable cases when continued during convalescence, to prevent relapses; (3) to combat local infections with the typhoid bacillus, as for example, bone suppurations which arise in the period of convalescence; and (4) for the removal of the typhoid bacilli from the feces and urine in the case of typhoid carriers.—The Alabama Medical Journal.

Radium in Gout and Rheumatism.

His (British Med. Journal.) has used radium in 200 patients and he finds that in suitable cases it answers well as a therapeutic measure. The diseases in which it has been tried are chronic rheumatism, gout, myalgia, &c. Cases ought to be carefully selected. Early cases only of rheumatism or other diseases should be submitted to treatment. It is useless to treat by this method chronic cases where there may be old exostoses and bony ankylosis. The dosage is not yet on a very satisfactory footing and the calculation of the dose is by no means uniform throughout the world: A commission appointed in 1910 by the International Congress of Raidiology in Brussells. has accepted as a unit the action issuing from one gramme of radium. Each case must be judged on its merits and the dose employed will be regulated by the reaction of the patient to the drug and the progress of the disease when under treatment.

A New Theory of the Production of Anaesthesia.

Buerker (Muenchener Med. Wchschrft. says that anesthesia is produced by narcotic agents in such a way that these bodies, which are by no means indifferent in their chemical character, become accumulated especially in the nervous system; on account of their great solubility in liquids. However, this accumulation does not suface, and a chemical reaction occurs through the nartocic agent taking possession of the active oxygen of the nervous substances. The oxygen is thus wtthdrawn from the nerve-substance, which is extremely orid of oxypen, and the consequence is the temporary asphyxiation of the nerve-substance, combined with paralysis to its physiological function, The products formed in the oxidation of the narcotic agent explain in part the acidulation of the organism, and and indirectly account for the increased formation of ammonia which must be interpreted as a process of neutralization. The mobilized and decomposed fats and lipoids may be regarded as the source of the acetone, which is formed in abundance as compared to the normal standard. The altered metabolism in general accounts for the unpleasant after effects of anesthesia through narcotic agents.

The Dr. arrived at his conclusions on the

basis of his findings, in electrolytic experiments.

The Prophylactic Action of Nuclein Against Puerperal Infection.—Graff, of Wertheim's clinic in Vienna, has examined the question whether we may expect to improve the morbidity of the puerperium from the action of preparations of nuclein. Animal experiments have shown that the resistence to infection may be materially increased by prophylactic injections, while tn the presence of existing infection the results were quite negative. In studying such a question as that proposed above two points must be considered: (1) the course of the leucocyte curve during labor and the puerperal period, and (2) the general reaction to nuclein preparations. of women during these times.

It was formely stated that there is usually a hyperleucocytosis during pregnancy, but in the light of more recent studies this proposition can no longer be maintained without certain modifications. Several recent studies of the subject have shown that there is no pronounced increase in the leucocyte count if the latter be taken before the beginning of labor pains, and Pankow has shown that there is no progressive increase during pregnancy, while Graff has had the same results. On the other hand, during labor and until several hours after delivery of the placenta there is an increasing hyperleucocytosis. In addition to individual variations, it depends also upon whether the patient be a primipara or a multipara. Thus Rieder found an increase in the number of white blood corpuscles in primiparae, but only in a certain proportion of multiparae; while others have found an increase during labor irrespective of the number of preceding labors. According to Zangmeister and Wagner the amount of increase of the leucocytes depends upon the duration of the labor and above all upon the intensity of the labor pains, which condition according to Hahl is brought about largely by the white cell collected in the enlarged vessels and lymph tracts of the uterus being pressed out into the general circulation stage, the number is greatest.

As regards nuclein prophylaxis, its action must be considered with respect to two periods, namely, what is its effect during labor, and then at about the forth or fifth day, when the more serious puerperal infections are so liable to occur. The attempt to increase the number of leucocytes during labor is not very promising for several reasons. Firstly, the hyperleucocytosis during labor is already so great that it cannot be exceeded by the highest numbers attainable in the nonpregnant. It is quesionable whether such an effect, even if possible, might not be harmful. Moreover, too much cannot be expected from such an exaggerated increase, since the dangerous pathogenic germs after all only enter the wounded areas in the uterus during the puerperium, and the hyperleucocytosis continuing only for two or three days at most. would have but little prophylactic action. In examing the effect of nuclein injections after the disappearance of the physiological increase attending labor, it has been found impossible to increase the number of leucocytes. Pankow found that on the third day the normal ebb could not be held up or changed to a flood tide by nuclein, but rather fell the original question under consideration must be answered in the negative—Zentralbl. f. Gyn.

A Case of Hypogastrodidmy.

The Allg. Wienr med. Zeitung., in Neufeld describes this rare case of twins joined at the pelvis and abdomen; delivery occured spontaneously without medical help. The rightdiameter 20 cm., bi-parietal 16 cm. The left sided child was smaller; length 37 cm., head circumference 26 cm., mento-occipital diameter 16 cm., biparietal 12 cm. Eyes noses, mouths chests and lungs normal. No heartsounds heard in right child; over the heart of the left there was a soft murmur. Percussion showed normal dimensions in both. The individual formation of the children ceased at the lower part of the thorax, commencing at the left ribs, the abdomen and pelvis were common to the two children. At the lower part of the abdomen there was a cleft four and one-half cm. long and two cm. wide; the cord passed through the upper part of this in a fissue. Just beneath this was a large curved mass, probably the ectopic bladder. At the lower corner of the cleft there were four papillomatous structures. One of these resembled a rudimentary penis; there was a fine opening at the top through which no catheter could be passed. The symphysis was widely separated. There was no anus, but two linear skin creases in the perineum. There were four arms with normal finger; in front there were two legs with normally developed toes. From the back a third lower limb was seen, seven cm. higher than the other two and articulated to the pelvis of the left child. The foot was a club foot with five abnormal toes. There was besides, on the dorsum pedis near the metatarsal articulation, a sixth toe. The children lived three and a half days.

Vaccine Treatment of Tuberculosis.

Shaw believes that treatment with tuberculin of cases of pulmonary tuberculosis has not yet been satisfactorily proved to be efficacious' What is needed is a rigorous proof by animal experiments that an infection once initiated can be overcome by the use of tuberculin, and then before these results can be applied in treatment more definite facts must be obtained of the proportion of affected human beings who are capable, without external aid, of overcoming pulmonary tuberculosis. It will be long before these desiderata are obtained, and it should be as long before tuberculin is used for other operative purposes.—The Practitioner.

Treatment of Angiomata with Radiotherapy.

Weil (Paris med.,) states that radiotherapy is the treatment par excellence for all kinds of angiomata, though it is little known. It is very easy of application and very effective. He has published twenty-six cases treated by this method at the Hospital Trousseeau. Of these fifteen were entirely cured; five are still under treatment; The remainder took but a few treatments. Ten cases treated and cured were raised growths, soft in consistency, the base prolonged deeply into the tissues. Three cases were deep subdermic angiomata, with insignificant alterations of the skin. Two cases were port-wine stains. It is necessary in deep growths to produce an inflammation. A white scar is substituted for a red mark. It is necessary to irradiate the lesion only, the other tissues being protected by lead shields perforated to axpose the growth. If the growth is entirely superficial the full strength of the rays should be employed. If the lesions are both superficial and deep one should combine sittings with rays filtered by plates of aluminum of a thickness of one-half to one millimeter with sittings of the full strength of the tube. Hard tubes should be used. After the double irradiations a rest of fifteen days should be given. In angiomata with infiltrated bases and in plain angiomata at first stronger applications should be employed so as to get a more rapid action; when an erythema appears the applications should cease until the integument looks normal again.

Tubercular Adenitis.

Glandular tuberculosis presents a problem to the clinician not easy of solution, for its management involves not alone the application of drugs, but also the selection of proper diet and the ordering of and obedience to a hygienic regime which may be extremely difficult of regular enforcement. Next to fresh air and sunshine, an abundance of nutritious food, cod liver oil offers the largest measure of success and is a necessary adjunct to the foregoing measures. Since the majority of these patients are children of tender years, great care in the choice of the cod liver oil product must be exercised if the physician would derive from it the fullest remedial benefits.

The essentials of a cod liver oil preparation are effectiveness and palatability, and these qualities are surely found in Hagee's Cordial of the Extract of Cod Liver Oil Compound. For these reasons Cord. Ext. 01. Morrhuoe Comp. (Hagee) is especially indicated in scrofulous conditions, and will prove to be the physician's most dependable selection from materia medica. It may be continued for indefinite periods.

New Treatment of Abdominal Surgical Shock.

Hopkins (Tex. Med. News) believes in the following method of treatment, which is especialty suitable for shock during the few hours or days following an abdominal operation: Take out two skin sutures as near the umbilicus as the wound will permit, then pry apart the continuous sutures in the fascia and peritoneum. You can now see if hemorrhage is present. See that a nurse has ready very hot and cold normal salt solution, a reservoir with four feet of rubber tubing, together with a glass tube or canula six to eight inches long. Both rubber and glass tubes should have a diameter of one-third to one-half inch. Have a quart of saline solution at temperature of 112° Fahr. in reservoir, which should hang three feet higher than abdomen. Now have wound held open, so that you can see omentum or intestines, also see that the tube and canula are now full of the hot solution, then insert the long canula beneath the omentum, if possible, pushing it upward so that the glass tube penetrates to the posterior peritoneum up behind the transverse mesocolon to the neighborhood of the posterior wall of the stomach, getting as near to the solar plexus as possible. The solution, still at 112° Fahr., is now allowed to run in as rapidly as it will. Probably a pint will fill the abdomen and be enough. This will take only five or six seconds. During the first two or three seconds of this time the patient feels little or no pain; but during the remaining two or three seconds the pain is very severe, for then the splanchnic nerves, the solar and hypogastric plexuses are being strongly irritated by the heat and pressure of the hot salt solution. As the patient is not under an anesthetic, the reflexes are not depressed by it. The irritation of the splanchnic nerves and sympathetic ganglia at once cause contraction of

the intestinal arteries, veins and portal vein, and thus a marked rise in blood pressure. The radial pulse returns or its pressure is markedly increased. The glass tube is taken out quickly; a small piece of gauze is laid over the wound and a strip of adhesive plaster applied, then a tight abdominal binder to sustain the pressure. If this treatment should not succeed, it is to be repeated in one or two hours. In addition to the above treatment, the author advises hot salt solution per rectum, ten ounces every two hours, principally on account of getting the heat near the hypogastric plexus and splanchnic nerves; also full glasses of hot water to drink for similar purposes; otherwise, do not disturb the patient with hypodermics or by even raising the foot of the bed—just keep her warm and as comfortable and peaceful as possible.

Taft's View of American Physicians.

While the opinion of President Taft may not be as important as his partisans would have people believe, still it is a pleasure to record his views on the medical profession and its achievements. In declining with regret an invitation to attend a banquet of the Philadelphia Medical Society, he remarked: "I may say one thing, and that is that we have real ground for national pride in the fact that England, France, Germany—Germany not so much so—and Holland have been engaged in the colonial business in the tropics for a hundred years, some of them two hundred years, and yet it remained for American physicians, and especially the physicians in the army, to discover more things in the ten years since the Spanish-American war than were discovered in the whole two centuries before that time, and if nothing else justified the Spanish American war the discoveries of the American physicians since that time—what I may term the sequence of the war—were ample to justify the expenses of the war ten times over. It is a real record of achievement of a national character that every one who understands it must dwell upon with sincere pride."—The Lancel Clinic.

Danger of Prolonged Use of Quinine.

Graziani (Edinburgh Medical Jounal) reports some investigations made by him regarding the possible danger of continuous administration of small quantities of quinnine as a prophylactic against malaria. The Dr. administered quinine hydrochloride to rabbits and guineapigs in doses proportional to that used for man in the prophylaxis of malaria. As a result he found that the growth of quinized animals was distinctly impaired as compared with control animals receiving only injections of physiological salt solution. Apart from this interference in growth quinine had apparently little action. It appears from Graziani's experiments that any prolonged use of quinine is by no means an innocuous proceeding, as it may prevent the growth of young animals, and subsequently lower their power of producing immune bodies and of resisting microbic infection.

Somnolence and Insomnia.

Salmon (Revue de Med.,) says that normal sleep is induced by intoxication—an accumulation of waste products in the circulation—and that the extent to which the toxins affect the nervous system is regulated by the glands having an internal secretion, chiefly the hypophysis and the thyroid. As long as the functional integrity of these glands is preserved sleep is normal. In thyroid insufficiency or in the first stages of affections of the pituitary gland, drowsiness is an early and fairly constant sign. In complete absence of the glandular secretion the action of the toxins upon the nervous system produces insomnia and excitability, as in the advanced stage of Basedow's disease or in suppuration of the pituitary gland by destroying the "sleep function."

He has found also that the chromatophilous substance is increased in conditions associated with somnolence and decreased in insomnia.

Congenital Hypertrophic Stenosis of the Pylorus.

Nicoll in The London Practitioner says that the surgeon and physician are equally responsible for the excessive mortality in this condition. The surgeon fails to realize that dietetic treatment is often effective. This is especially to be born in mind in the slighter cases and in very feeble infants. The physician, on the other hand, delays operating for too long a time in the hope of avoiding an operation, with the result that when the surgeon is finally called in the child is in an extremely enfeebled condition.

There is no rule for the diet. Often the food which would appear the worst possible succeed when many of the theoretically perfect fail. Frequent changes are necessary. If a particular food does not "stay down" after three days' trial, it should be abandoned for another.

Operation should be undertaken, according to the author, at the end of three weeks if all dietetic measures have failed. Vomiting which persists three weeks rarely yields to any form of food.

The Dr. feeds his patients on a form of

very thin paste made by mixing, with milk, flour which had been baked. If this fails he sesorts to operation.

Right-sided Pleural Effusion.

Geddes (Brit. Med. Jour.) has made further studies of this condition by dissections of the cadaver. The points of greatest interest were those connected with the distortions and compressions of the great veins. Rotation of the trachea around the vertical axis and carrying forward of the right lung root resulting from the opening up of a retrotracheal pleural recess, have not apparently been recognized as likely to lead clinically to the partial or complete occlusion of the lumen of the superior vena cava. The almost complete occlusion of the inferior vena cava resulting from the downward rotation of the apex of the heart and the great diminution in the capacity of the right auricle under the influence of pressure are facts of clinical importance.

As a result of the cases studied, the author thinks that one cause of sudden death in cases of right pleural effusion may be occlusion of the great veins as they approach the heart, especially occlusion of the inferior vena cava. A furthur point of interest is that the descending rhoracie aorta is pushed clear of the left side of the vertebral bodies. This fact may explain the "area of dulness" extending on the left side of the vertebral column in right sided pleural effusion.

Review of Ehrlich's "606" in Syphilis.

Lesser states that this preparation exerts the same action as arsenic in other forms in other diseases as well as in syphilis, only in a much simpler, speedier and more energetic manner. The general condition improves, the patients regain appetite, and their pallor yields to the tint or comparative health. This organo-tropic effect, as he calls it, is also the main factor, in his opinion, in its efficacy in syphilis, as it reinforces the natural defensive processes. He doubts whether the direct destructive action of the new remedy on the spirochetes in the body is the principal fector in the cure of syphilis. The dosage should be selected with t e aim to influence the natural defensive processes and increase the vitality of the cells without reference to any direct destructive action on the spirochetes. It has been his impression, from his observation, that the symptoms and the transformation of the Wassermann reaction are not influenced any more by large than by moderate doses. If the reaction is still positive six or eight weeks after the first injection it might be addisable to repeat the dose. A negative reaction seems to indicate, he thinks, at least a temporary inactivity on the part of the spirochetes.—Berliner Klinische Wochenschrift.

The Problem of Muscular Rheumatism.

Schmidt (Medizin. Klinik), says that myalgia and neuralgia are closely related, and the assumption of a causative neuralgia of the sensory nerves of the muscles affords the best explanation for the frequent combination of muscular rheumatism with true neuralgia. All the symptoms of ordinary myalgia are thus entirely accounted for, and more satisfactorily than by the assumption of local processes within the muscles themselves of an inflammatory or exudative character, which have never yet been positively demonstrated.

Extreme sensitiveness and tenderness on deep pressure belong to myalgia as well as neuralgia, extending in the former diffusely over various muscular areas; while in neuralgia it it especially pronounced in the nerve-trunks, originating from the nervi nervorum. The posterior roots are assumed by the author to be the seat of the myalgic noxious factors upon the basis of the fact that irritative states of the posterior roots are particularly apt to determine spontaneous deep pains, which are aggravated by pressure, and also on account of the peculiar distribution and the migratory character of these pains.

As regards the nature of the pathological process, no severe inflammatory lesions can be envolved from the anatomical point of view, seeing the variability and ephemeral character of the symptoms in the majority of the cases. The etiologic factors must be sought in the association or combined action of toxic infections as well as constitutional factors, both possessing equal importance in this connection.

The treatment, in a general way, should be identical with the therapeutics of neuralgia, namely essentially symptomatic. Injections of physiological salt solution (5-10 ccm.) directly into the painful parts, are especially recommended; In long standing or unusually severe acute cases, the author suggests lumbar puncture, followed by spinal anesthesia with stovairn or novocain-adrenalin as worthy of trial.

Arteriosclerosis of the Cerebral Blood Vessels.

Woda (Arbeitin a. d. Neurolog. Inet. a. d. Wiener &niv.) has made a study of the initial changes in the arteries of the brain, especially the basilar artery; upon subject of all ages in whom death was due to different causes.

Perfectly normal arteries were not seen except in children. In all other cases degenerative changes had taken place. Apparently, there is no relation between the

condition of the cerebral arteries and the arteries of the other organ, as marked degeneration of the former often occurred in young subjects who presented no signs of arteriosclerosis in the peripheral vessels; while advanced arteriosclerosis in the peripheral vessels; while advanced arteriosclesis is perfectly compatable with almost normal cerebral arteries even in advanced age. The changes seemed to be most marked in the intima and corresponded to Jore's characteristic of arteriosclerosis.

The earliest changes consist in proliferation of the internal elastic layer of the intima, which is to be regarded as a compensatory measure, usually following some infection, intoxication or severe heart strain. When the proliferation is excessive it gives rise to degenerative and metaplastic processes which gradually attack the other layers. A simple diminution of the elastic tissue, occurring in old subjects, with proliferation of the intima is also a compensatory measure and results in arteriosclerosis.

He thinks, therefore, that arteriosclerosis is an attempt on the part of nature to compensate for the diminished elasticity. The Dr. distinguishes between physiologic arteriosclerosis occuring normally in advanced age, and pathologic artesiosclerosis which occurs at an early age in consequence of infections, intoxications and high blood-pressure.

Heart Disease In Pregnancy and the Puerperium.

Moran (Jour. of Obst. and Gynæc. of Brit. Emp.) points out the dangers accompanying pregnancy in the subject of organic heart disease. While the prognosis is always grave for the mother and child, the result in a given case depends upon the valves affected, the amount of compensation the condition of the heart muscle and the general state of the patient. Crippled placental circulation is responsible for abortion in the early months, while asphyxia, often fatal to mother and child, may occur during labour. Post partum hæmorrhage and pulmonary œdema may cause death immediately after labour, while owing to diminished resistance acute endocarditis may supervene if puerperal infection occurs. The nature of the cardiac lesion has considerable influence on the clinical phenomena observed; mitral insufficiency predisposes to œdema and asystole; aortic insufficiency to syncope and epistaxis; mitral stenosis to cerebral embolism, hemiplegia and post-partum hæmorrhage. He says that pregnancy and parturition are dangerous to the cardiopath, and reports seven cases occurring in his own practice. In the management of the cardiopath, attention is drawn to the importance of careful and continual observation, and of guarding the patient against excitement, over-exertion, excessive exposure to cold. The skin should be kept active by a daily tepid bath and the bowels and kidneys carefully regulated. Pulmonary and renal congestion are to be guarded against by the wearing of proper clothing and the avoidance of sudden chills. When compensation fails he advises the usual medical measures, reserving induction of labour until viability of the child is reached. In the conduct of labour he advises a hypodermic of morphia during the second stage, with artificial assistance so as to avoid shock and sudden lowering of blood pressure. Immediately after deliverv a sand-bag should be placed on the abdomen to guard against the latter danger. The placenta should be allowed to be expelled spontaneously and no friction or kneading of the uterus practised but free bleeding favoured to relieve the disturbed circulation. Ergot must not be given. In regard to the cardiopath, the author is in full accord with the dictum of Peters: "No marriage for the unmarried, no pregnancy for the married, and no nursing for the confined."

Haemorrhagic Cystitis after Rectal Operations.

Hadda (Berlin Klinische Wochenschrift) calls attention to the frequency with which operations on the rectum are followed by blood in the urine and cystisis. Of 153 patients undergoing rectal operations ninety-four, or 61.4 per cent., had to be catheterised, and of these forty five, or nearly 50 per cent., had urinary trouble, that is to say, four had simple cystitis, forty had hæmorrhagic cystitis, or halmaturia without cystitis, and onehad an abcess of the prostate. The hæmaturia generally appeared from the third to the sixth day after the operation. In half of the cases the cystitis began with a severe hæmorrhage, with the other usual signs of inflammation of the bladder. At first the urine appeared to contain blood only, leucocytes appearing later. The hæmaturia generally ceased about the third to the fifth day, and after that there was only an ordinary catarrhal cystitis, which cleared up in the course of two or three weeks. The author attributes this complication to the anastomoses between the rectal and vesical veins, rendering easy the passage of germs from the one part to the other and facilitating thrombosis of the vesical venous ptexus. The Doctor suggests that the copro stasis which usually follows rectal operations may also cause a migration of bacilli through the intestinal walls.

Treatment of Angiomata With Radiotherapy.

Weil (Paris med.) states that radiotherapy is the treatment par excellence for all kinds of angiomata, though it is little known. It is very easy of application and very effective. He has published twenty-six cases treated by this method at the Hospital Trousseau. Of these fifteen were entirely cured; five are still under treatment; the remainder took but a few treatments. Ten cases treated and cured were raised growths, soft in consistency, the base prolonged deeply into the tissues. Three cases were deep subdermic angiomata, with insignificant alterations of the skin. Two cases were port-wine stains. It is necessary in deep gwoths to produce an inflammation. A white scar is substituted for a red mark. It is necessary to irradiate the lesion only, the other tissues being protected by lead shields perforated to expose the growth. If the growth is entirely superficial the full strength of the rays should be employed. If the lesions are both superficial and deep one should combine sittings with rays filtered by plates of aluminum of a thickness of one-half to one millimeter with sittings of the full strength of the tube. Hard tubes should be used. After the double irradiations a rest of fifteen days should be given. In angiomata with infiltered bases and in plain angiomata at first stronger applications should be employed so as to get a more rapid action; when an erythema appears the applications should cease until the integument looks normal again.

Vaccine Treatment of Tuberculosis.

Shaw believes that treatment with tuberculin of cases of pulmonary tuberculosis has not yet been satisfactorily proved to be efficacious. What is needed is a rigorous proof by animal experiements that an infection once initiated can be overcome by the use of tuberculin, and then before these results can be applied in treatment more definite facts must be obtained of the proportion of affected human beings who are capable, without external aid, of overcoming pulmonary tuberculosis. It will be long before these desiderata are obtained, and it should be as long before tuberculin is used for other operative purposes.—The Practitioner.

Hygiene of the Mouth and Pulmonary Tuberculosis.

Moeller, (Munch. med. Wochen.) reports a case of apical phthisis with enlarged cervical glands and caries of the teeth, in the cavities of which tubercle bacilli were found. He draws attention to the above question. The Dr. states that as a result of the presence of tubercle bacilli in carious teeth, and in the ulcers found in putrid and unhygenienic mouths, the individual may become infected. It is well known that tubercle bacilli can pass through the apparently uninjured mucous membrane in the child, so that in the case of ulcerations of the mouth this passage will in all probability be facilitated.

In a research on the frequency with which tubercle bacilli are found in carious teeth and ulcers of the mouth, this author obtained the following results. He divided his cases into two classes—those with evidence and those without evidence of pulmonary tuberculosis.

The first series included 194 children with diseased lungs. In 153 of the cases carious teeth were present, and in 182 ulcerated conditions of the mouth. In the carious teeth, tubercle bacilli were found fourteen times and pseudo-tubercle bacilli twenty-three times. In the ulcerated patches tubercle bacilli were demonstrated in 35 cases, and pseudo-tubercle bacilli in 42 cases.

The other series included 53 children with healthy lungs, 36 of whom had carious teeth and 41 foul conditions of the mouth, while in only 14 could one describe the mouth as clean and healthy. In the 36 cases with carious teeth, tubercle bacilli were not found in a single instance, but pseudo-tubercle bacilli were detected in nine cases. From the ulcerated patches, tubercle bacilli were obtained six times and pseudo-tubercle bacilli 18 times.

While admitting that the tubercle bacilli more frequently gains entrance by the tonsils and pharynx, he lays stress on the possibility of the above routes, and, moreover, preventable sources, hence the hygiene of the mouth is a question of the utmost importance.

Functions of the Thymus.

E. Weill presents a study of the functions of the thymus in which he shows that it is not an exclusively lympoid organ, and that in all its history, physiological and pathological, it presents differences from the lymphoid glands which include the role of the epithelial elements. It arises from an invagination of the layers of the entoderm at the evel of the third brachial cleft. From the beginning of the fourth month of intrauterine life until the fourth year of life its function is active; then atrophy takes place. At birth it is in great part a lyphoid organ with a distinct covering and a central reticulum filled with leucocytes. Its structure resembles that of the bone marrow. There is a true balance between the development of the lymphoid and the epithelial elements. Injection of the thymus extract causes fall of blood pressure, as does that of the lymphatic glands. But it differs widely from them in its chemical composition. Removal of the thymus in young animals causes at first obesity and a state of edema, later cachexia and atrophy. Its effect is only temporary, showing that its function can be taken up by other organs, such as the genital organs, hypophysis, spleen, suprarenals and thyroid.—Lyon Medical.

The Absorption of Milk Casein From the Skin and Subcutaneous Tissue.

Roesler (Wien. Med. Woch.) has experimented with cutaneous and subcutaneous application of proteids, which are sometimes not well taken by mouth although they are readily absorbed by the mucuous membrane. The Dr. used for his experiments the preparation known as sanatogen. He prepared one-half Gram of sanatagen with water, and for another experiment with vaseline, both cold, in such a manner that a fairly consistent paste resulted. These were spread upon muslin which had been weighed, then the entire poultice was weighed in order to ascertain any possible resulting loss. Then the watery mixture was placed on the right and the vaseline mixture on the left arm of the experimental person, who was young. The arms had been washed with soap and warm water and shaved and cleaned with alcohol and ether. After six hours both compresses were removed, when it was found that of the watery mixture 46 per cent had been lost and of the vaseline mixture 20 per cent, this much, therefore, having been absorbed by the skin. On examination of the residue, it was found that of the casein in the watery mixture 18.4 per cent and of the vaseline mixture 21.2 per cent had been absorbed.

In order to ascertain the absorption through the subcutaeous cellular tissues, the author injected 20 cubic centimeters of a 2-per cent solution of sanatogen under the skin of the back. It was found that after six or seven hours the injected 20 cubic centimeters had been completely obserbed. Pain or other disagreeable sensations had not been observed. It was also found possible to cause the rapid absorption of like preparations in the media as frequently used in massage, such as vaseline, lanolin, etc. This procedure, in the author's opinion, is especially useful in cases where proteids are to be obsorbed at certain areas, as it may be desired in treatment with massage.

He says that it would be also interesting to treat neuraligia with sterilized sanatogen solution, and likewise atrophy due to inactivity or prolonged immobilization, which would be treated either by means of massage or by injections, or by both methods. Finally, the method might be of use cosmetically, and the author says that a 10-per cent sanatogen mixture has rendered him good service in his own case when his hands were chapped.

A Case of Ovarian Pregnancy with Diffuse Intraperitoneal Haemorrhage.

Lea (Jour. of Obst. and Gyn. of Brit. Emp) points out Spiegelberg's three essentials for the establishment of its diagnosis, viz., (1) the Fallopian tube of the affected side must be normal as shown by miscroscopic sections throughout its entire length, (2) the foetal sac must be in the position of theovary or connected to the uterus by the ovarian ligament, (3) the microscopic demonstration of ovarian tissue in various parts of the cyst wall. The case reported is an example of early ovarian gestation causing symptoms of diffuse intraperitoneal haemorrhage. A married woman, age 29, had always enjoyed good health until suddenly seized with severe abdominal pain, vomiting and faintness. Three hours later she was visited by her medical attendant, who found her gravely anaemic, with small rapid pulse. Shorlty afterwards Lea saw her and found her extremely pallid, pulse barely preceptible, exceeding 130 per minute. Menstruation had occurred three weeks previously and was quite normal and there was no haemorrhage from the uterus. The abdomen was somewhat distended, especially below the umbilicus, and very sensative to touch, especially in the left iliac region. Fluid in the abdomen was suggested by relative dullness in the flanks, with an obscure thrill. An indistinct fullness with slight resistance was palpable in the pouch of Douglas, but no obvious swelling of either appendage was definable. As haemorrhage was evidently continuing, it was decided to operate at once. On opening the abdomen a large quantity of blood with many clots was found free in the peritoneal cavity. Palpation of the course of each Fallopian tube revealed no obvious swelling. The left ovary was enlarged and from the surface projected a thin walled blood-cyst, which had obviously ruptured and collapsed. The left appendage was removed after ligature. Blood and clots were removed and the abdomen closed without drainage. The operation was well borne, although the pulse was almost imperceptible throughout. Forty ounces of normal saline solution were transferred into the median basilic vein. Recovery ensued without any complication. The menstrual period commenced four days later, continued for three days of the usual type and painless. There was no evidence of a decidua at any time during the illness. The pathological examination showed the left Fallopian tube was perfectly normal in appearance, the abdominal ostium being patent and the fimbriae healthy. The ovary somewhat enlarged, had been destended at its lower pole by a blood cyst which had ruptured and was partially destroyed during removal. Sections of the blood clot revealed a fragment in which chorionic villi were demonstrable to the naked eye and microscopically. Sections of the Fallopian tube showed the mucous membrane healthy through its entire length and no evidence of gestation or the formation of decidual tissue. Section of the ovary through the base of the ruptured sac showed dilatation of blood vessels, areas of haemorrhage in the stroma with numerous Graafian follicles. Sections taken from the various portions of the cyst wall showed the presence of ova-

rian tissue and follicles. No villi and no evidence of decidual cells or syncitium were detected in the ovarian stroma. The pregnancy is regarded as having occurred in a Graafian follicle lying just beneath the surface of the ovary. As a result of rapid growth the ovarian tissue became thinned out, forming a cyst capsule, rupture being followed by haemoperitoneum. The author points out that the symptoms of ovarian pregnancy are indistinguishable from those of tubal gestation. As a rule there is a history of a definite period of amenorrhoea, followed by pelvic pain, but accasionally the gestation may rupture in the early weeks without any menstrual disturbance, as in the case cited. In the majority of cases operated upon a large amount of blood has been found in the abdomen, as the ovarian vessels are large and bleed freely. In those forms of ovarian pregnancy which have continued to develop until the later months much difficulty may be experienced in determining the primary gestation site. Early destruction of the pregnancy with or without sac rupture is the usual termination, although the foetal sac may continue up to the third or fourth month of gestation. The pregnancy my be indicated by a haematoma, which may or may not contain an amniotic cavity, and its true nature can only be proved by the discovery of chorionic villi. Rupture of a blood-cyst situated in the ovary, or haemorrhage from a Graafian follicle or a corpus luteum is an occasional cause of intraperitoneal bleeding. The author cites cases of this kind, as described by Jayle, Lockyer, Blacker and Giles, in which severe bleeding may occur in the absence of pregnancy. He adds, however, the probability that some of these cases may have been the result of a ruptured gestation sac in the first stage, and advocates the only reliable diagnostic test: a careful search for foetal structures in the ovarian tissue and all the blood clots. A complete bibliography is appended and the paper is illustrated by three excellent coloured plates showing the structures removed at operation, and the microscopic appearances of chorionic villi in the blood clot, and of ovarian tissue in the blood-cyst

A Prediction Coming True.

Several years ago, when the reoganization of the American Medical Association took place, and subsequently when the various State Medical Societies were reorganized, the Editor of this journal, on several occasions, predicted that it was only a question of time before the Chicago political combination would undertake to bring about the same relations between State Medical Societies and the American Medical Association, that now exists between the county societies and the state societies.

The following resolutions will in a way, be self explanatory:

'New York, March 13, 1911.

Dear Doctor:—

At a meeting of the House of Delegates of the American Medical Association held in St. Louis, Wednesday, June 8, 1910, the following resolution was presented by Dr. Hubert Work, of Colorado:

Whereas, the plan of organization of the profession carried to its logical conclusion means that every member of a county society should be ipso facto a member of the American Medical Association, just as every member of a county society is ipso facto a member of a state society, and as it is the ultimate end of the plan that the American Medical Association should be coextensive with the organized profession throughout the land, and as nearly, if not quite, every state already has adopted the plan so far as making every member of a county society a member of a state society, therefore be it

Resolved, That the President appoint a committee to draw up details for extending the plan to the American Medical Association, and to present this plan to the various state societies for their consideration during the coming year, and to make a report at the next annual meeting of the House.

Dr. Alexander Lambert, of New York, moved as an amendment that the resolution be referred to the Board of Trustees, because it means a separation of The Journal from the membership in a manner which involves the finances of the Association.

The amendment was seconded, accepted, and the original motion as amended was carried.

The Trustees have given this matter full consideration, and at a meeting held in Chicago on February 3, 1911, the following resolution was passed:

Resolved, That the Board of Trustees refer to the various State societies the question of the desirability of extending the plan of organization as represented in the foregoing resolution, and request that the various state societies take action on this matter and report to the Board.

In accordance with this last resolution I beg herewith to transmit the matter to your society for consideration, and request that your report be sent to the Board of Trustees, American Medical Association , 535 Dearborn Ave., Chicago, Ill.

Very truly yours,
WISNER R. TOWNSEND,
Secretary Board of Trustees A. M. A."

They purposely and ingeniously omit, you will notice, to comment freely on the vital point, which is this: The finantial part of the scheme. Possible in the beginning they will say to a physician who wants to join his county society, that the membership will greatly benefit him, and that it will mean membership to his State Society, and also to the National Society, all for a small outlay. They may rest the case at this point for a year or two, and then they will incorporate in their laws a provision, which will mean this: that to be a member of a county society, the state society, and the national society, they also become a subscriber to the

state medical journal, and the national association journal. If they ever succeed in establishing this political and financial scheme, it will be the greatest medical monopoly that has ever existed among medical men anywhere in the world.

The editor of this journal certainly will regret to see the day the medical profession is controlled by such an autocratic ring as this will be.

Active Lobar Collapse of the Lungs After Abdominal Operations.

Pasteur, in The London Medical Lancet, gives the report of five cases. The symptoms of active lobar collapse are the following: Sudden dyspnea and cyanosis, generally accompanied by pain in the lower part of the chest; cough is not a prominent feature; there is an immediate loss of mobility of the affected side of the chest, always the side upon which the operation was performed. The movements on the healthy side, on the other hand, are exaggerated. There is dullness at the base, with weak breath sounds, becoming almost inaudible at the base. On the healthy side the lung apparently becomes enlarged by a process of compensation, and the apex beat becomes shifted to the affected side. This last symptom, according to Pasteur, is difficult to explain. He believes that the collapse of the lung is due to parital or complete paralysis of the affected side of the diaphragm, and the lesions are exactly similar to those found after diptheritic paralysis of the diaphragm. Pasteur has observed the lungs in about 15 cases of lung collapse arising from various conditions. In nearly all of them the lower lobe was collapsed, airless and sank in water. The condition should not be confused with post-operative pneumonia.

Arbitrary Standards in Medical Education.

For a number of years now legislation and the other agencies which control the requirements for the license to practice medicine have been urging us toward a condition of things which is generally contemplated with pride, but which may have its disadvantages. It has been growing harder and harder to gain admission into the medical profession with a promising status. One result of this increased difficulty is that the number of students of medicine has been decidedly reduced, with an incipient reduction of the general body of physicians. This in itself is by no means to be regretted, but it is to be feared that our constantly increasing requirements, particularly the requirements for admission to the medical school, are actually barring out young men who, even without the amount of collegiate or academic training required, might add lustre to the medicine of the present day. We should not plume ourselves on piling up difficulties in the way of such men. We fear that the law of supply and demand is in great danger of being lost sight of. We are not advocating a return to the slipshod methods, or lack of method, of the distant past, but we believe that there is danger of overdoing a good work, of putting the bars up too high, and we feel that no unnecessary restriction should be put upon entrance into the medical profession.—New York Med. Jour.

Some Observations on Fatal Cases of Pulmonary Thrombosis.

Glun and Nnowles (British Medical Journal.) says that spontaneous thrombosis is much commoner than embolism, in the proportion of 8 to 1 in some 1,200 postmortem examinations from a single hospital. We believe an unaccountable acceleration of the pulse or respiration rate, beginning in the second week after a major operation, especially abdominal, and associated with slight pyrexia, suggests the possibility of spontaeous pulmonary thrombosis and of a sudden fatal termination about the third week.

Cases of spontaeous thrombosis are overlooked from the assumption that only embolism can cause death in a few minutes, from neglect to remove and harden the heart and lungs together, and trace the distribution of the thrombi in situ in properly hardened specimens, and especially from neglect to make a thorough microscopical examination.

Even the association of pulmonary clots with others in the systemic veins does not necessarily prove that the former are embolic. Both may have arisen spontaneously and separately from similar causes.

A Radical Operation for Malignant Disease of the Testis.

Howard, in The London Medical Lancet, says the question of a radical operation for malignant disease of the testis has come more and more to the front of recent years. In other parts of the body the operations for malignant disease have been progressively elaborated until it is an axiom that extirpation of the growth, with the lymphatic glands the part drains into and the intervening lymphatics is the only radical form of operation, and that this should be done in all cases. In the case of the testicle, however, the deep situation of the involved lymphatics and the important structures which lie near them have appeared to negative the usual operative procedure, and surgeons on the whole have been content to perform castration and to trust that the lymphatics are not already infiltrated. The very few cases that escape subsequent recurrence in the glands show on what feeble grounds this hope rests, and a radical glandular operation appears to be the more urgent as local recurrence in the scrotum is rare.

He reports the following extensive and radical operation performed in July, 1910,

on a boy of ten, who had a small round-celled sarcoma of the left epididymis and testicle:

An incision was made into the testis so as to confirm the diagnosis. This was found to be correct, and an incision was then made over the external ring and the spermatic cord was separated and ligatured so as to avoid loss of blood from the incision into the testis. A second incision was then made from the external ring in a curved direction external to the linea semilunaris to about 11-2 inches above the umbilicus. All the layers of the abdominal wall were cut through and the peritoneum was exposed. This was dragged away from the retro-peritoneal tissue and was found to strip readily; the stripping was continued until the aorta and the common iliac and external iliac arteries were thoroughly exposed from the renal vessels downwards, the peritoneum being held back with broad retractors. The exposure was very thorough, and the whole length of the vessels was easily seen by the onlookers. The tissue round the aorta, renal arteries, inferior mesenteric, common and external iliacs, and the commencement of the internal iliacs was removed with scissors and Kocher's dissector until the vessels were quite clean as in an ordinary dissecting room dissection. Numerous glands were removed in the tissue, but none seemed to be enlarged. When the big vessels were quite clean attention was turned to the spermatic vessels, which, with the lymphatics, had been turned back with the peritoneum. The testis with part of the scrotum was detached from everything except the spermatic cord, and the vas was lagatured as it turned down into the pelvis. The spermatic vessels were then stripped away from the peritoneum as far as the renal vein, a ligature was applied, and the whole growth, artery, veins, and lymphatics were removed. (Fig. 2.) The exposure of the vessels, etc., was so complete that the dissection was easily carried out without any danger. The duodenum readily turned back off the aorta. After removal of the testis the peritoneum was replaced, the retro-peritoneal area was drained with a tube, and the abdominal wall was sutured. Time of operation, one hour. No marked shock. Bleeding insignificant. Recovery.

The operation went a step further than Jamieson and Dodson's ideal operation, in that it cleared the whole of the external iliac artery and vein, instead of the upper third only. Their dictum that the operation "is exceedingly difficult and dangerous, if not impracticable," Howard says, does not hold good in boys, at any rate.

Never Fails to Give Marked Relief.

Cytone is a remarkably systemic antiseptic and cellular reconstructive. Administered hypodermatically, it accomplishes the most remarkable results in cancer, lupus and similar affections. Not every case will succumb to its influence, but used early and vigorously it has been shown to be the most effective remedy for relieving pain, arresting discharge, overcoming fetor, promoting healing, and removing all evidences of malignancy, ever offered to the profession. Although Cytone has been under investigation for several years, during which time a large number of apparent recoveries have been obtained by competent medical men, no claims are made that it is an absolute specific for cancer or kindred diseases. Sufficient time has not elapsed to warrant such claims, even though it has removed every vestige and symptom of many recurrent and inoperable cases. That it has stopped pain almost instantly, decreased discharge, and produced apparent cure to the extent of complete dissipation of the growth in over 25 per cent of all cases, and never failed to give marked relief no matter how far advanced the cases have been, is sufficient, however, not only to justify, but to make it imperative that every physician should use Cytone in every case of malignant growth coming under his treatment. In many cases the results will be little short of startling, and even when cure is impossible, the progress of the disease will almost invariably be checked and the patient's comfort materially enhanced.

The Bugbear of "Indigestion."

"It is often said that ours is a 'nation of dyspeptics.' Medical men appreciate how apt this statement is, and never was there a time when it was more true. Only yesterday one of them remarked, with a touch of humor, that 'people are living so fast today that they do not stop to masticate their food'—a wise observation, we must admit.

"And besides—in the matter of eating have we not as a race departed from the so-termed simple life? Have we not in more than one way become denatured rather than civilized? It seems that the things people eat today are censored to tickle the palate, rather than nourish and upbuild the body—and the consequence of such pleasurable and improper eating is a disordered stomach."—From Brochure on Taka-Diastase.

One is tempted to quote further from this booklet, so interesting is the story—in subject matter and in the manner of its telling. To do so, though, were to defeat the present writer's object, which is to insure a wider audience for the booklet itself—a booklet which is well worth having, whether or not one expects to avail himself of its therapeutic suggestions.

As the quoted paragraph attests the brochure is well written. Its literary flavor, however, is but half its charm. In its physical make-up the booklet is a distinct novelty, its quaint cover design, its fitting inner embellishments, and its oriental suggestiveness lifting it well out of the casual

and commonplace.

The brochure tells how Taka-Diastase came to be—tells how it is made, and in the language of the distinguished chemist and scientist who evolved and gave to the world this valuable ferment. It explains, in attractive, readable form, how Taka-Diastase acts in defective starch-digestion, in gastritis, in diarrhea and constipation, in wasting diseases, and in the diet of infants. It contains a full list of Taka-Diastase products and gives hints as to dosage. Altogether it is an important little work, and one that readers of this paper are advised to send for. A copy may be obtained by any physician by addressing a request for the "Taka-Diastase Brochure" to the publishers, Parke, Davis & Co., at their home offices in Detroit, providing, of course, the edition has not previously been exhausted.

School Children and Farming.

In an admirable paper entitled "Bring Up the Child in the Way He Should Go," in the May Lippincott's, Colonel Willard French makes a strong plea for including at least the rudiments of agriculture in public school training. He points out how at present education leads the youth of the land away from farming, even in rural communities.

"As a nation, we fully appreciate the value of science in farming," says Colonel French. "We expend millions of dollars, annually, through the bureaus of our National Agricultural Department for the benefit of the farms and farmers of America. Everybody knows the infinite value of the work which has been accomplished, and when the boy with brains and energy does resist those first temptations and turns investigative attention to farming, he soon finds vast stores of information gathered for him. He studies by himself the mysteries o fthe art, as he studied in school his geography and history, and presently he is one of the monarchs of America, making his farm a gold mine.

"Now, the point is this: when we have all the information and scientific knowledge gathered at fabulous expense (free to every farmer who will send for it), all the whys and wherefores making farming an intensely interesting and profitable art, hidden away where only those get at it who by some accident are forced to resort to farming, and who have the brains and energy and inclination to investigate the wonderful discoveries and new and helpful ideas which have cost the country so much, in an earnest effort to improve the farms and farmers, why in the name of common sense should not the elements of it all be put into text books for our public schools, to help boys to become farmers? Why should not the science of agriculture be at least an important fact in the common school curriculum? Would it hurt even the city boy and girl to know a little about how things grow, and why and where, and the art of making the best of Nature? Would not some knowledge of the science of nature make any boy or girl happier for life, even if he or she never saw a farm? It would at least make it possible for the boy when he graduates to turn to farming as he now turns to business, with something of a practical foundation, and a new sense that farming is not, in reality, the same old limited grind and drudgery of his father and grandfather."

Death From Injection of Cocaine Into the Urethra.

Several cases of death after the injection of cocaine into the urethra in ordinary doses for the production of anesthesiea have been recorded. The rules for this procedure, therefore, appear to require revision or some safer drug should be used. The latest case is recorded in the **Journal of the Royal Army Medical Corps** for May by Captain A. D. Jameson, R. A. M. C. A soldier had a urethral fistula secondary to a stricture three inches distant from the meatus. An attempt was made to dilate the stricuture with metal bougies, but it was found to be very sensitive. Four days later another attempt was made to pass o bougie after injecting into the urethra a little of a 10 per cent solution of cocaine, the urethra being compressed between the finger and thumb behind the stricture. The solution of cocaine was not retained but allowed to escape when the syringe was removed. After five minutes the stricture was found to be still sensitive and more cocaine was injectbut the patient never rallied. The necropsy later, while the stricture was being dilated, the patient's colour was noticed to be very bad and a convulsion lasting half a minute occurred. The pupils were widely dilated, the pulse was imperceptible and the forehead was covered with sweat. Artificial respiration was commenced, strychnine and brandy injected, an electric battery was used but the patient never rallied. The necropcy showed nothing important, except a few cauliflower vegetations on the mitral valve, which, however, acted perfectly. The solution of cocaine had been in use for a fortnight. The amount retained in the urethra must have been very small as when the pressure was removed after an injection its walls came together again and the fluid was expelled. In Dr. Dixon Mann's "Forensic Medicine," two cases are quoted from sudden death from injection into the urethra of a drachm and 20 minims respectively of a 4 per cent solution of cocaine. However, these were the only fatal cases in a series of several thousands. In another case recently recorded death occurred after the injection of 30 minims of a 10 per cent solution of cocaine. Three cases of dangerous symptoms after the injection of 20 minims of a 10 per cent solution, have also been reported. Most authorities say that a 10 per cent solution, of cocaine may be swabbed on a mucous membrane and in Caird and Catheart's "Surgical Handbook" it is

stated that 2 drachms of a 5 per cent solution may be injected into the urethra with safety. Captain Jameson refers to another case mentioned to him by a brother officer in which death followed the introduction of a small amount of a 10 per cent solution into the urethra to facilitate the use of the urethroscope. But although he has for years been in the habit of applying a 10 per cent solution of cocaine to mucous membrane for small operations he has never before seen any toxic effects.—The London Lancet.

Wounds of Hand and Tincture of Iodine.

Reclus (Bull. de l'Acad. de Med.) holds that in the treatment of wounds of the hand and fingers, particularly of those engaged in manual labor, the method hitherto almost universally followed, in which the application of an antiseptic or aseptic dressing is preceded by vigorous disinfection of the wounded parts, does harm rather than good. In the frequent conditions of such injuries when the hand of the workman is hard and cracked and, it may be, covered by a layer of black dirt, made up of epidermic debris, fatty matter, and dust, the abundant microbes resist the action of the cleansing disinfectant, and, carried by hot water into the deep parts of the wound, set up inflammation in spite of the protective dressings.

For such painful and very uncertain plan of treatment the author would substitute the application, as soon as possible after the receipt of the injury, of tincture of iodine over and around the wound. After the thick layer of the tincture, applied over the seat of injury by a small sterilized brush, has been exposed to the air for a few minutes to permit evaporation of its alcohol, the dry and brown surface is covered by a copious antiseptic dressing. This should be renewed at the end of the day or on the following morning, and afterwards at gradually increased intervals until it is undisturbed for four days. The application of the tincture of iodine should, it is held, be the primary and essential act in this treatment, and not be preceded by any attempt to cleanse and disinfect the wounded hand.

It is, the author points out, a very simple and ready method, but the special advantages claimed for it as a first-aid treatment in factories and in military surgery are rather lowered by the importance attached to the rule of using only tincture that is quite fresh. It is laid down as an essential condition that at the end of the eighth day it should be condemned as being not only useless but dangerous. Reclus reports very favorably of the results of this treatment, and asserts that with the use of tincture of iodine in wounds of the hands both acute infective mischief and chronic inflammatory edema have been very seldom observed.—British Medical Journal.

Digitalis, Diastolic Blood-Pressure and Cardiac Strength.

Brunton (British Medical Journal,) states that the plan recommended by Strassburger and improved by Josue for reckoning the actual work of the heart is to take the mean pressure as ascertained by adding the systolic and diastolic pressure together and dividing the sum by two, multiplying these by the pulse-pressure and by the pulse-rate.

The Dr. states he is not certain that either the formula or the calculatio nis quite correct, but as far as he can work it out, if he takes the tracings which he has made, the normal is equal to 1406 mm. of mercury in a minute, after the digitalis begins to work it is only 1229, and when the action is fully established it is only 818, so that in spite of the heart having greater resistance to overcome, the amount of work it does in a given time has actually diminished, and so digitalis gives it rest. At the same time the raised tension increases the nutrition of the tissues, and accelerates elimination by acting as a diuretic. The way in which the action of the digitalis is aided by the association of blue pill is still unknown, but as a matter of practical experience there can be little doubt of the efficacy of the combination. Digitalis thus gives rest to the heart, but rest to the heart cannot well be obtained without rest to the body, and so absolute quiet is necessary. It is also a great help to the heart if some of its work can be done for it. Massage, therefore, he looks upon as a most important adjuvant to rest in cardiac disease. It is quite evident that another adjuvant where the vessels are too much contracted is vascular dilatation, and in many cases in which it is wished to restore the healthy circulation of the vessels it is wise to dilate the vessels as well as stimulate the heart. Amongst drugs the best for this purpose are, he thinks, the iodides and nitrates. In some cases of cardiac asthma nitrites seem to be of little or no use, while iodides give great relief at once. The trouble is that iodides frequently derange the digestion and cannot be continued. Where we wish a rapidly lowered pressure he thinks the nitrites such as the nitrite of soda, nitroglycerin, nitroerythrol, and spirit of nitrous ether are indicated. Of late years another method of treating cardiac disease has come into practice. By some it is much lauded, but by others it is much slighted. This is the so-called Nauheim treatment, first introduced by the brothers Schott, and consisting in baths, massage, and resistance exercises. It is now twenty years since he first examined into this treatment. An old friend of his who was an army surgeon in India came home with very bad mitral regurgitation. He took a house in Norwood and came up to him once or twice a week for advice. He did the best he could for him by means of drugs, but he did not improve in spite of all his endeavors, and at the end of the summer he

told his friend he must go across to Nauheim. He went. The Dr. followed him to see the method of treatment and to see how he was getting on. He came back very greatly improved, and before the winter set in he was able to return to India to serve out three years and retire with a pension from that time on. This was a test case, because he had done his best to cure his friend, but the Nauheim treatment succeeded where drugs had failed.

In August last Brunton's heart having become dilated in consequence of nervous strain, he went to Nauheim on his own account, and was under the care of Professor Schott. The improvement he made was very great, the dilatation became much less, the shortness of breath greatly diminished, and the general strength correspondingly increased. He tried to analyze the conditions that had brought about this satisfactory result, and came to the conclusion that baths, massage, and resistance exercises all had a great deal tot do with it, but their effect was greatly increased by the rest, mental and bodily, enjoyed during the treatment. It is interesting to know the treatment which he followed. Breakfast at 8 o'clock, bath at 9:20. Hirsch's Hotel, where he was staying, was about three minutes away from the baths, so that he slowly walked there. After staying in the bath a few minutes the attendant rubbed him down with hot sheets. He then dressed and returned to the hotel. He then undressed again, went to bed, and stayed there for an hour, going to sleep if possible, but at any rate lying quiet, and if he read at all it was contrary to orders. It was hardly worth while to dress again, so as a rule he simply lay quiet for an hour or more, and then the masseur came, who after massage put him through a number of resistance exercises. It was then time for lunch, so that the whole forenoon had been taken up with the treatment. After lunch he read a little, wrote a letter or two, took a short stroll in the park, and then returned to dinner at the hotel, and then went very early to bed. The effect of the baths was first of all to somewhat slow the pulse and to dilate the peripheral vessels, as was shown by the skin under water becoming of a rosy color, while that which was out of the water remained white. The effect upon the blood-pressure was not constant, and he was unable always to take it under similar conditions. The effect of abdominal massage was rather to raise the tension, probably by driving blood out of the splanchnic area, while the effect of the resistance exercises was somewhat to lower it. Of course, as far as regards the good effect of the treatment in his own case there can be no doubt whatever.

It may be said that the same good results might have been got by having it carried out at home, but this is just the point. The author could not have had it at home. He might have had the baths, and the exercises, but most certainly he could not have had the rest. He has advised a Wier Mitchell rest cure in a good many cases, and in several of them he has been persuaded by the patients and the patients' friends to allow the cure to be carried out at home, but these cases have all failed with one exception, which was that of a married woman without children. The whole of the first floor was given up to her, and she was as completely isolated there as she would have been in any nursing home, and the same is the case with Nauheim. At present the author states he knows of no place where one can get the same complete combination of treatment with rest and arrangements for gentle exercise as there, and it is this that makes the treatment so successful. The rationale of it is that it accelerates the circulation and eases the heart by dilating the vessels, while the heart itself is reflexly slowed by the baths. At the same time the mental and bodily rest which is insisted upon is the greatest of all the factors, and is the one that is the most difficult to obtain at home.

The best treatment for an exhausted heart as for an exhausted body is rest.

The Action of Thiosinamine.

Charteris (Glasgow Medical Journal) states that his experience with thiosinamine preparations is extremely unsatisfactory, and quite fails to sustain the extravagant and enthusiastic reports of those who have obtained remarkable results in joint cases, Dupuytren's contracture, nervous diseases, etc. Hitherto, the author asserts, he has never seen any real benefit result from the use of thiosinamine. On the other hand, the injections are not painful. The only drawback is that the patients in many cases experience an unpleasant bitter taste in the mouth, with bitter garlic-like eructations. Still, fibrolysin apparently sometimes causes more serious symptoms. Several cases of thiosinamine intoxication have been recorded. The symptoms are fairly distinct. As a rule, the first few injections are comparatively well borne, though there may have been such slight after-effects as headache and muscular slackness. Then, quite suddenly, serious symptoms develop within a few hours of a fresh injection. The usual course of events is violent vomiting, nausea, with rigors and great weakness. The pulse is rapid, and fever persists for a day or two. If the injection is subsequently repeated these symptoms reappear rather more rapidly, but in one case at least tolerance has eventually been obtained.

The most serious case of poisoning was that of Grosse. The febrile reaction lasted for three days, but the apathy and muscular weakness persisted, and the patient required a prolonged convalescence of four weeks before he could resume work.

Other cases of marked thiosinamine intoxication have been reported by Keitel, Brinitzer, and Hayn. Billaud noted lack of muscular control, apparently from deficient muscular tonus, in a patient treated for gonorrheal ankylosis.

Though none of his patients showed any appearance of intoxication, the author knows of three (unpublished) instances in which the use of fibrolysin injections produced a well-marked febrile reaction, with great muscular prostration and weak cardiac action, the symptoms corresponding closely to those recorded by other observers.

A somewhat unusual type of poisoning is mentioned by Hayn, who states that a patient of Galewsky reacted to his eighteenth injection of thiosinamine, with fever, apathy, headache, and muscular prostration, and in addition developed a purpuric rash. Clifford's case seems to have been similar. The Dr. mentions bleedings in the skin and mucous membranes.

The writer concludes as follows:

1. Thiosinamine preparations produce no definite alteration in the blood count whether administered by the mouth or by subcutaneous injection. Even when this administration is prolonged over weeks the blood undergoes little change.

3. The therapeutic results from thiosinamine treatment have been disappointing.

4. The drug, though usually well borne, may produce poisonous symptoms.

Treatment of General Osteitis.

Symonds (The London Medical Lancet), advises after opening the medulla in central cases of osteitis with great bone thickening, the insertion of a metal tube of half an inch in diameter, composed of silver, German silver, or aluminum, fitted with a flange externally and for convenience of reintroduction, and supplied with a conical pilot of boxwood or German silver. The metal tube gives rise to no irritation, can be readily taken out, boiled, and reintroduced by the patient, and does not hinder him working. At the end of six or twelve months the tube can be reduced in size, and finally a solid metal rod, with a flat nail-head, or a piece of thick silver wire with a bent-over end externally, can be left in. These solid drains answer very well and might perhaps be used after six months. Practically all that seems necessary is a vent for a small amount of secretion, and this can escape by the side of the rod.

As an example one case may be quoted, that of a woman aged forty-two years. At the age of eleven she had acute necrosis of the tibia on the left side and smaller foci at the lower end of the right femur and both humeri. At thirty-nine years of age a small sequestrum separated from the right femur. When seen at the age of forty-two she had a painful swelling at the lower end of the right tibia, present for three months, but with the limb occasionally painful for the previous ten years. The bone was trephined and thick creamy pus came from the central cavity. It was drained by a half-inch metal tube, and the patient was soon allowed to walk about. The tube gave no trouble; she took it out and boiled it herself daily. A smaller tube was introduced at the end of twelve months, and meanwhile the swollen tibia slowly reduced in size. At the present time, nearly two years after, the bone appears to be normal.

Injections of Camphorated Oil.

Hohne and Pfannenstiel first conceived the idea of employing camphorated-oil injections into the peritoneal cavity as a prophylactic measure against peritonitis in cases of laparotomy for severe infective conditions. The treatment was based upon certain experiments upon animals. They found that if an intra-peritoneal injection of oil were made some days before introducing a very virulent culture of bacillus coli into the peritoneal cavity an inflammatory reaction was produced which had the effect of opposing the absorption of the inoculated microbes and enabled the animals successfully to resist infection. This method has now been taken up K. Kolb, of Bale. In the course of a year 172 laparotomies have been performed, and in seventy-nine of these intra-peritoneal injections of sterilized camphorated oil have been administered. All these cases were gynecological and included conditions of pyo-ovaritis, tubular gestations, tuberculosis of the genital organs, cancer of the uterus, etc. Instead of injecting the oil two or three days before operation, according to the method of Hohne and Pfannenstiel, Kolb introduced the oil at the time of the operation, or, if there were a glass drainage-tube, immediately after the operation, to the extent of 50 Cc. The strength of the camphorated oil was 10 per cent., the same as that used for subcutaneous injections in cases of pneumonia. Considering only those cases in which there was definite infection of the peritoneum during the operation, such as the penetration of pus from an ovarian cyst into the peritoneal cavity, the author had nine deaths out of fifty-three such cases, and only one of them was due to peritonitis, giving a mortality of 1.8 per cent. for peritonitis. In four cases there were cutaneous abscesses showing the virulence of the infection.—The London Hospital.

Bronchial Asthma.

Five cases of typhoid bronchial asthma were examined by Galebsky with the bronchoscope. In all cases the mucous membrane of the bronchi was markedly swollen and edematous and covered with tenacious mucous. It is therefore very probable that the real cause of asthma

is an edema and hyperemia of the mucosa, a condition allied to that of angioneurotic edema, and that a spasm of the bronchial musculature or the diaphragm, if it occurs, is a secondary phenomenon. The rapid onset, short duration and frequent recurrence would fit well into this theory. In every case bronchoscopy considerably improved the condition, particularly if the mucous membrane was brushed with cocaine and adrenalin, silver nitrate, menthol or chloretone. A definite cure was not, however, obtained, though one of the patients remained free from attacks for a long time. It is a mistake to regard bronchoscopy as a very difficult or dangerous procedure.—Klin.-therap. Woch.

Treatment of Eczema in Infants.

Rocaz writes: Eczema, however slight, has a deleterious effect upon the general condition of the child, and should be treated. It is the cause of insomnia and constant irritation, while the skin lesions permit acute bacterial infection to invade the body. Local treatment should be directed to removing the crusts and exudate, especially on the scalp; this may be effected by using a sterilized oil or poultices of potato flour or formentations for several days. This treatment reduces the inflammation and calms the irritation. Antiseptic lotions are only indicated when the eczema is of the impetiginous type. Very weak solutions are employed—1 in 4,000 of mercury cyanide or 1 in 10,000 of the sublimate without the addition of alcohol. One of the most efficacious lotions is zinc sulphate and copper sulphate aa 2 grn., saffron 40 grn., made up with camphor water to 1,000 parts. Carbolic acid is unsuitable for children. After cleansing the eczematous surface an emollient ointment may be used; zinc oxide is the most soothing, but in seborrheic eczema salicylic acid gives excellent results. It may be applied as follows: Acid salicylic 10 grn., zinc exide 3 grn., petrolatum 30 grn. Where petrolatum is not tolerated it is well to substitute glycerin or benzoated ointment. Sulphur is useful for eczema of the scalp when seborrhea predominates. Intense irritation and redness of the skin is reduced by applications of a liniment composed of lime water and sterilized oil. Dry eczema is best treated with ichthyol, or, where greasy substances are unsuitable, by a powder containing talc, bismuth, subnitrate, and zinc oxide; this should be frequently dusted over the affected area. Some method to prevent the child scratching itself must be adopted. Baths are more harmful than useful; they increase the demititis or spread the infection over the skin; they should be used with circumspection. Whatever the source of eczema may be, even if it seems to have no connection with the alimentary canal, the digestion and feeding must be carefully regulated. In breast-fed children the nurse must be dieted, or it may be necessary to change her for another. In hand-fed babies digestion should be promoted by the administration of sodium citrate. It has been advised to change the diet to a mixture of whey and barley water to which a little casein is added. It is necessary to regulate the climate conditions, the high air of mountain districts being especially beneficial, while the sea air aggravates the complaint. Internal treatment consists of gentle purgation, castor oil, or calomel, followed by citrate or bicarbonate of soda. The value of intestnial antiseptics is doubtful, but the lactic ferment is much to be recommended. When it is suspected that the thyroid gland is functionating imperfectly, the thyroid extract can be given; in many cases it has been successful, but it cannot be regarded as a routine treatment. The writer considers that when other means have been tried and the eszema continues intractable,thyroid medication should be tried; it may give unexpected results. The drug is well borne even by young infants.—British Medical Journal.

Treatment of Trichocephalus Enteritis.

Cade and Garin point out that the trichocephalus worm is one of the most common of intestinal worms, and that it may give rise to various reflex nervous manifestations, to more or less marked anemia, and to toxic symptoms. One of the commonest symptoms produced by this worm is some form of digestive disturbance, and the authors believe that in all cases it causes enteritis, which may be of a dysenteric character, and associated sometimes with short rises of temperature. It is probable that these symptoms are produced as a result of infection of the body by the microbes normally inhabiting the intestines which are inoculated by the worm; possibly, also, some of the intestinal symptoms may result from nervous disturbance, but this factor probably plays but a small part. Clinically, trichocephalus enteritis shows itself in various forms. Sometimes a severe and rebellious diarrhea occurs, accompanied or not by colicky pains and tenesmus, but usually without much pain. The stools are liquid, yellow and sometimes mixed with mucus. Visible blood is uncommon but occult blood is almost always present. This diarrheal form resembles very much that due to tuberculous disease of the intestines. If there is much mucus in the stools and there are colicky pains and tenesmus, dysentery is stimulated. In other cases constipation alternating with attacks of diarrhea is liable to occur, and the stools then often contain mucus and false membranes; if to these symptoms are added attacks of abdominal pain, muco-membranous enterocolitis, or intestinal dyspepsia, is likely to be diagnosed. In these cases there may be pain or pressure over the right iliac fossa,

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and appendicitis or typhlitis is suspected. Sometimes the symptoms take the form of heaviness after eating, less commonly of pain and rarely of vomiting. Loss of appetite is common. As these patients often exhibit neurotic manifestations their symptoms may be put down to nervous dyspepsia. Headache, dizziness, vertigo, loss of strength and asthenia, out of proportion to the general condition of the patient, are also common. A rise of temperature in trichocephalus infection is common, either a moderate rise lasting for some days, or even sudden rises to a greater height. The diagnosis can only be arrived at by, if necessary, repeated examinations of the stools for the ova of the worm. Eosinophilia, though helpful, is not by any means a constant sign in trichocephalus infection. With regard to the treatment of this condition, the author adopts the following method: Thymol in 1 Gm. doses is given in the form of a cachet three or four times a day for three or four days, and this is followed by a saline purge. No wine, alcohol or oil should be taken during the treatment. This treatment should be resumed, if necessary, after a few days. Although it is not always successful in removing the worms, even after several seances, it is absolutely devoid of danger, and in every case causes decided amelioration of the symptoms. The author considers that in persons suffering from vague intestinal symptoms of indefinite causation, a search should be made for ova of worms in the stools, as if these be found a definite and rational line of treatment can be adopted.—British Med. Jour.

Radiotherapeutic Treatment of Angiomata.

E. Albert-Weil advocates the treatment of all angiomata by means of the x-rays. He finds that all kinds of angiomata may be cured by this means, whether they be raised above the skin, or depressed with deeply seated prolongations, or mere port wine stains. For the red marks are substituted white marks that are much less noticeable. It is necessary to produce an inflammation in order to remove the growth, but the surrounding skin should be protected by lead shields. Hard tubes are to be used and the full strength of rays, alternating with irradiations with an aluminum shield in place. The author has obtained a cure in fifteen cases of angioma by these applications.—Paris Medical.

A New Mode of Employing Mesotan.

Weil (Munch. Med. Woch.,) speaks of a recently introduced mesotan cream. This is a 20 per cent., ointment in which mesotan is mixed with a small amount of stearin. By this means the absorption and disintegration of the mesotan are delayed, but the therapeutic effect remains unaffected, and the action produced on the skin is in fact an excellent one. This cream is useful in painful affections such a lumbago, muscular rheumatism, acute rheumatism, neuritis of rheumatic origin, and various inflammatory affections of the joints. Night and morning this cream should be rubbed into the affected part. He has never seen any ill effects follow its use, as now and again appear when mesotan oil is employed. In one case of erysipelas a favorable result followed where mesotan cream was used, and he therefore recommends this remedy in similar cases.

Frontonasal Morphoea.

Sequeira in the British Journal of Dermatology mentions the case of a patient who was seven years old.

Years ago, after an attack of bronchopneumonia, a small spot was noticed on the forehead. It was, according to the mother's account, pink in color. Gradually the affected area increased in size and became pale. Eventually it extended from the crown to the root of the nose.

It was difficult to get any exact particulars as to the time occupied in the gradual spread of the affection, but it appeared to be certainly some months. Of late the alopecia had attracted attention at school, and the mother brought the child to the hospital to know if the hair could be made to grow upon the bald area.

The child, on examination, was evidently thin and pale, but of average intelligence. The general health appeared to be good, and there were so signs of visceral disease and no palpable enlargements of the lymphatic glands. The thyroid gland was not affected, and there was no abnormality of the pulse, proptosis, or evidence of hyperthyroidism.

On examining the skin a pale depression was seen starting from the right side of the root of the nose, where it was one-fourth inch wide, and spreading upward over the forehead and onto the scalp, reaching as far back as the coronal suture. The inner margin of the depression was the middle line, but the outer margin gradually sloped outwards, so that the affected area was of the shape of a very long triangle, the base at the vertex being two inches wide. The area was shiny and smooth and obviously depressed, and on the scalp completely devoid of hair. Its edges in parts had a pinkish tinge, and there were many telangiectases on the patch, these being more numerous on the scalp.

On palpation it was found that there was a shallow groove or gutter in the frontal bone the whole length of the sclerosed area. The sclerosed skin could not be pinched up, and was only very slightly movable on the bone.

In addition to the morphoeic area, which is well shown in the figure, there was a pink, smooth patch on the side of the right alanasi about the size of a three-penny-piece. This was slightly elevated, but in the photograph it is hardly visible.

Sensation over the affected areas appeared

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to be very slightly impaired. The eyelids were unaffected.

The Prognosis of Congenital Syphilis.

Hochsinger (Ergeb. der inneren Medizin und Kinderheilkunde) gives his experiences of congenital syphilis

He says that twenty years ago he delivered a paper before the Heidelburg Medical Society, when he drew conclusions from 380 cases observed by himself. Since then he has written nothing on the subject, but has had the opportunity of observing 436 cases, giving a total of 816. Two hundred and eight of these cases, emanating from 134 families, were under observation for a longer period than four years.

He divides the subject into two—antenatal and postnatal prognosis.

The first question discussed is the viability of the product of conception. The cases are divided into three classes, according to the class of society to which they belong.

1. In this series, consisting of 258 women with 1,220 pregnancies, mostly illegiti-

mate, 51 per cent. ended in abortion, 44.7 per cent. were born alive, but developed syphilis soon afterwards, and three per cent. were born healthy, and remained so as long as they were under observation, which, however, was not long.

2. In a second series of 134 women, who were observed over a much longer period and springing from a better class of society, of 253 pregnancies, 44.4 per cent. were dead born, 46.2 per cent. were born syphilitic, and 7.7 per cent. were born healthy and remained so.

3. In the third series comprising 11 private families, in only one of which was the mother definitely syphilitic, and observed over a period of twenty years, there were 29 products of conception, of which 33 per cent. were born syphilitic, and 66 per cent. were born healthy. In this series all the patients had been well treated, and not one had married sooner than three years after the infection. In five of these eleven families there was not a single syphilitic child born. In four of the families renewal of the treatment after the birth of the first syphilitic child caused a cessation of the transmission of the disease. Thus, according to Hochsinger, the transmissibility of the disease depends to no small extent on the social condition of the parents.

That the fate of the product of conception depends in no small measure on the evidence of disease in the parents is shown by the following statistics:

1. In 38 families, where the father was undoubtedly syphilitic but the mothers remained free from symptoms, there were 53 still births, 80 living syphilitic children, and 37 healthy children, i. e., 22 per cent.

2. In 11 families, where the mother was definitely syphilitic but the father healthy, there were 19 still births, 21 living syphilitic children, and two healthy children, i. e., five per cent.

3. In 63 families, where the father denied syphilis and the mother presented no symptoms, there were 101 still births, 110 living syphilitic children, and 14 healthy children, i. e., 11 per cent.

4. In 22 families, where both parents were definitely syphilitic, there were 61 still births, 44 living syphilitic children, and no healthy children.

In this last series, although there is the highest proportion of syphilitic children, the parents had been as heroically treated as in any of the other series, so that the virulence of the infection depends on the fact that both parents were syphilitic.

While referring in detail to cases where the mother was definitely syphilitic, and father free from symptoms of lues, he quotes the folowing histories:

1. A 23 years' old woman, who had been two and a half yaers before her marriage infected on the nipple, was energetically treated with mercury and ceased to present symptoms. Her husband was healthy and was unaware of his wife's previous history. She gave birth to several stillborn children and several living syphilitic children, but all the time her husband did not present symptoms of having been infected.

2. A 30 years' old woman, with healed gummatous syhpilis of the nose, married a healthy man, and though she gave birth to several syphilitic children her husband continued free from any luetic manifestations. Hochsinger has observed 11 families in which the mothers before marriage had been infected, and in which the fathers were healthy and remained so, although of the 42 products of the conception only two or five per cent. were born free from syphilis.

The birth of healthy and diseased children alternately he has observed, but never where the mother was definitely syphilitic. Frau P., in concubinage had four healthy children, and after the death of her lover, when the above children were eight, seven, five and three years old respectively, married a latent sphilitic, and gave birth soon afterwards to a seven months' old macerated fetus. Shortly afterwards she was delivered of a healthy child, which remained healthy for four years. Still later followed two still births, and then a living syphilitic child. Neither parent had ben treated since the marriage.

Frau S. had during her first marriage given birth to syphilitic children, who had been under observation for years. The mother always appeared healthy, had never been treated, and married again soon after the birth of the second child, and had two healthy children. In another case a healthy child. Neither parent had been treated since during its second year from the coadyloma on the mouth of a syphilitic child of the first marriage, the mother being the same in both instances.—Glasgow Medical Journal.

Miscellaneous.

"Kelene"—Safe Anaesthesia, by using "Kelene" (Pure Chloride of Ethyl).—Ex-from a prominent medical journal.

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Lactose and Lactic Acid in the Stools of Children Suffering From Green Diarrhea.

Lavialle (Brit. Journ. Dis. of Children), found that lactose given for a short time

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in large doses caused diarrhea, during which lactose is found in large quantities in the urine and in small quantities in the feces. In green stools lactose is found in excess of the total ingestion of this sugar, and where it is absent lactic acid is found. The presence of these two substances seems to result from the rapidity of the intestinal transit. The Dr. is of opinion that lactic acid, characteristic of green stools and already present in the intestine previous to evacuation, is a normal product, provided in considerable quantity during digestion at the expense of the carbohydrates, and whose elimination is associated with a pathological condition. Its role in the intestine may be to excite the secretion of certain glands, or to facilitate the breaking up of certain substances and to further the action of the digestive ferments. He thinks that its chief use is to maintain at a nearly constant level the nature of the bacterial flora of the intestine by promoting a tendency towards mono-microbism, a role which explains the good results obtained by the adminisration of cultures of various lactic bacteria and of fermented milk such as kephis and koumiss. Lesage has shown that the green coloration of diarrhoaric stools may not be entirely due to biliverdin, but also to a green pigment secreted by a coliform microbe. In the latter instance the feces would not give the reaction of the bile-pigments. He, in making autopsies in cases of gastroenteritis, has noticed an intensely green color of the bile in the gall-bladder, and that yellow semi-solid feces present very distinct green spots. Now, bile could only give a uniform green coloration to feces if it is already green in the gall-bladder, and the author is now engaged in investigating the origin of this local green coloration.

High Temperature After Labour and Its Treatment With Aspirin.

Fink (British Med Jour.,) mentions the case of a woman about thirty years of age, who presented symptoms suggesting puerperal infection. She was treated by rest in bed under suitable hygienic conditions, douches were applied locally twice daily, a mixture containing ergot was prescribed to stimulate uterine contractions, the bowels were kept open, and potassium bromide in full doses was given to procure sleep. The fall of temperature under this treatment was not satisfactory, so aspirin was ordered. Ten grains thrice daily was given at first, and this resulted in a fall of temperature, while the skin became moist and the patient slept well. The dose was then reduced to five grains three times a day, and latterly to a five-grain dose at bed time.

Anti-Typhoid Fever Inoculation.

Russell, U. S. A., says that the following conclusions seem to be justified. "Typhoid has invariably appeared in armies in the past and may be expected in the future. The usual prophylactic measures are only partially available in camps. Vaccination is simple and harmless, and wherever used has reduced the incidence and mortality of typhoid. The immunization of every individual in the army is perfectly feasible, and it offers the greatest hope of freedom from this plague in the future. Anti-typhoid vaccination has long since passed the experimental stage. Since 1904, 60,000 men have been vaccinated in India, over 7,000 in Southwest Africa, and over 14,000 in the United States, and in no case has any harm followed its administration. The time has come when its use should be extended, not merely in the military services, but also among the civil population."

Vaccination Against Typhoid Fever.

Dr. Wood, U. S. A., says: "The administration of anti-typhoid serum, as now practiced, is harmless. The protective value of this measure has been fully demonstrated, as shown by the statistics of the medical department, and in order that the army may, as far as possible, have the benefit of the protection thus afforded and enjoy immunity from a dread disease, commanding officers through the service are enjoined to use their best efforts to bring about the voluntary acceptance of this prophylactic treatment by all officers and enlisted men and by all civilians resident at military posts, except those over forty-five years and those known to have had the disease.

"In case of an outbreak of typhoid at a post compulsory vaccination of the entire population, including the families of the men and civilians, may be had, in the discretion of the department commanders."

Fungus Affections of the Finger Nails.

Low (in The Edinburgh Med. Jour.,) says that during three years he has met with 19 cases of fungus affections of the finger-nails, which he classifies as (a) ringworm, (b) favus, and (c) fungi of unknown origin. Sixteen of these cases were of the ringworm variety; they were mostly females between 20 and 30 years. The complaint rarely occurs in connection with ringworm. Treatment has for its object removal of as much of the diseased nail as possible. The nail should be scraped daily, and an application made on cotton wool of a solution of potassium iodide 3i in liquor potassae and distilled water, of each 3ss. After half an hour this finger being covered with a rubber finger-stall. The nail soon becomes black and soft and is easily removed. This treatment gives the best results. He further describes Norman Walker's treatment, which consists in applying Fehling's solution on lint and covering with a finger-stall for a day or two. The nail is thus softened and can be easily removed. After removal of the nail, a solution of copper sulphate (10 grains to the ounce) is applied as a continuous dressing.

The Charlotte Sanatorium
Charlotte, N. C.

Surgical - - - - Department

THE SURGICAL ROOMS OF THE CHARLOTTE SANATORIUM

The Sanatorium is especially arranged for the handling of a large number of operative cases. Seven rooms have been set apart for the operative department. The designers spared no pains or expense in making these rooms perfect for which they are used, and they are examples of modern efficiency. This department is cut off from the rooms in which the patients are subsequently cared for. They face the South and have an abundance of light and ventilation.

Seventh Street Entrance.

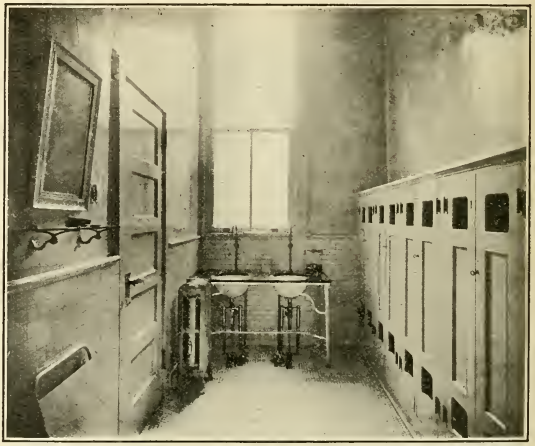
Minor Operating Rooms.

The first room is used for a minor operating room and can also be arranged for examinations and treatments. Tables of the latest pattern are used for operations or examinations, or both as may be necessary. The room is shown prepared for a minor operation with all the necessary dressings and instruments. The cabinets in this room are of steel and glass and contain dressings and sterilized materials of all kinds for general use in the surgical department. In this way the sterilized materials are kept free from dust or other contamination and are always ready for instant use.

Instrument Room.

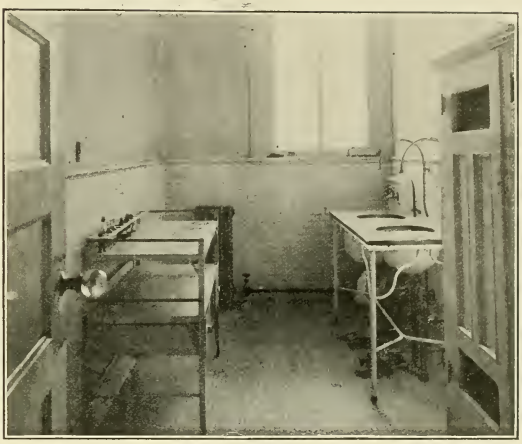
The next room is the instrument apartment. It contains large instrument cases of the latest models. These cases are filled with every modern surgical instrument, many of which are imported. The collection is most complete and any needed instrument is at once available for any emergency that might arise. To one side are the solution stands in which the standard stock solution are kept, so that the working solutions can be obtained at any moment.

Across the hall from the two rooms previously mentioned is the dressing room for the surgeons. In this room are six roomy lockers and a double lavatory of glass and porcelain. The lavatories were specially made for the Sanatorium and have complete foot control. Adjoining this room and a part of it, is a private bath and toilet. Every convenience is at hand for the operator and his friends to become thoroughly prepared before going into the operating rooms.

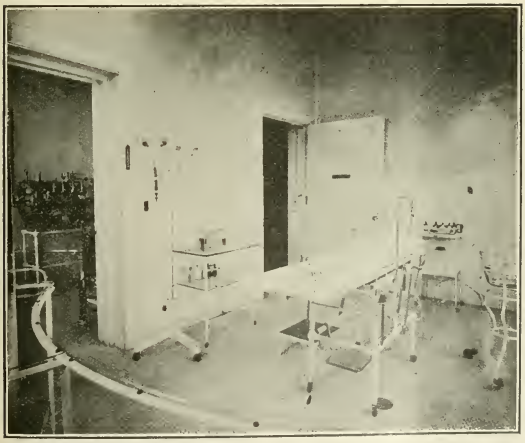


Surgeon's Dressing Room.

The next room is the nurses'dressing and preparation room. A large double lavatory with solid glass top and porcelain bowls are used for hand sterilization. These are operated entirely by the foot so that the hands need not touch anything after the preparation has once begun. A large slop sink is set in one corner for solutions and soiled discharges from the operating room. A white enamel table is used for emergency medicines and materials for quick dressings.



Nurses' Dressing Room.

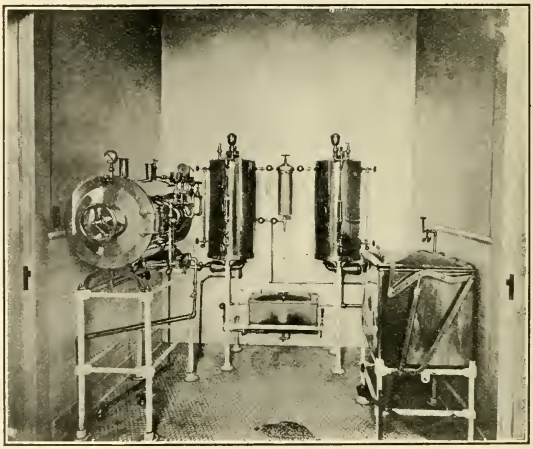


Operating Room A.

This shows operating room A, and indicates the completeness and convenience of the arrangement. The table is of the latest model of white enamel frame, with glass and nickel plated top and nickel plated steel fixtures. On this the patient can be put in any position at a moment's notice. A large circular glass table is used for the instruments and dressings and can be wheeled to the operators' side where everything is at hand. The glass top stool, medicine and anesthetic tables are easily placed at any desired point. The floor is tile, the wainscoting of marble with enamel ceiling. The woodwork is in white enamel and every thing can be thoroughly cleaned.

Operating Room B.

This room is Operating Room B, which has the same dimensions walls and floors as operating room A. Both rooms have large windows facing to the East, South and West, and large sky-lights overhead. In addition to these lights there are in each of these rooms, ten electric globes which combined given an artificial light equal to 1000 candle power. So that an emergency operation at night can be done as well as a formal operation at noon. This room like the other, is fitted up with the most improved-table, stands and other accessories that go along with a modern operating room.



Sterilizing Room,

The sterilizing room is, of course, one of the important rooms connected with the operating department. It is situated between the two operating rooms A and B, and communicates with both of them. This room is furnished with two water sterilizers, a large pressure sterilizer for dressings, a full sized instrument sterilizer and a roomy utensil sterilizer in which the largest pans, basins or pitchers can be boiled. By these means everything going into either one of the operating rooms can be made perfectly sterile and absolutely safe.

This shows the hall leading from the main corridor to the different operating rooms. The first door to the left opens into the minor operating room, the second door is the instrument room, the ones at either end of rolling stretcher, open into operating room A on the left and operating room B on the right. The first door on the right is the surgeons' dressing room and the next opens into the dressing room for the nurses.

Hall.

The solution basins for the hands are shown on stand between the dressing rooms. The patients' carriage or rolling stretcher is shown beneath the clock.

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The operating Department in General Surgery is in the hands of the following Specialists:

GENERAL SURGERY— G. W. Pressly, M. D.; C. M. Strong, M. D.; B. C. Nalle, M. D.; and A. G. Brenizer, M. D.

GENITO-URINARY SURGERY—A. J. Crowell, M. D.

EYE, EAR, NOSE and THROAT—A. M. Whisnant, M. D., and J. P. Mattheson, M. D.

CHEMICAL and MISCROSCOPICAL LABORATORY—L. B. Newell, M. D.

LABORATORY OF SURGICAL PATHOLOGY— A. G. Brenizer, M. D,. Director.

The second annual report of the surgical department shows that 444 operations were performed during the year 1910.

A Review of Ehrlich's "606" in Syphilis.

Lesser states that this preparation exerts the same action as arsenic in other forms in other diseases as well as in syphilis, only in a much simpler, speedier and more energetic manner. The general condition improves, the patients regain appetite, and their pallor yields to the tint or comparative health. This organo tropic effect, as he calls it, is also the main factor, in his opinion, in its efficacy in syphilis, as it reinforces the natural defensive processes. He doubts whether the direct destructive action of the new remedy on the spirochetes in the body is the principal fector in the cure of syphilis. The dosage should be selected with t e aim to influence the natural defensive processes and increase the vitality of the cells without reference to any direct destructive action on the spirochetes. It has been his impression, from his observation, that the symptoms and the transformation of the Wassermann reaction are not influenced any more by large than by moderate doses. If the reaction is still positive six or eight weeks after the first injection it might be addisable to repeat the dose. A negative reaction seems to indicate, he thinks, at least a temporary inactivity on the part of the spirochetes.—Berliner Klinische Wochenschrift.

Recovery from Optic Atrophy.

Buchanan in the Glasgow Medical Journal describes recovery under treatment in a number of patients presenting all the signs and symptoms of optic atrophy. The patients have been chiefly males between thirty and fifty years of age, and steady healthy men in responsible positions. Toxic amhlyopit, syphilis, alcoholism, renal disease, and such disposing factors were excluded. In each case the complaint was of slowly increasing defect of vision, both for near and distant work. Peripheral contraction of the visual fields, diminution of central vision, and the ophthalmoscopic appearance of early atrophy have been the foundations of the diagnosis. The cases have been watched long enough to exclude nervous diseases; hysteria and malingering have also been negatived. In fact the investigation of the cases from the point of view of ætiology was always fruitless. Under medieal treatment—chiefly strychnine iodide of potassium in liberal doses—a slow but steady improvement began after a month or so; perfect vision and visual fields have been restored, usually in about a year. The appearances of atrophy in the fundus have, however, not been affected. He asks: Are these cases of ordinary atrophy which have been taken in time and prevented from reaching the incurable stage? o rare they a special class of case which would be amenable to treatment in any stage? The Dr. inclines to the former of these two suppositions.

The Medical Treatment of Cholelithiasis

Anderson, in the Australian Medical Journal, says that in view of the important part now generally assigned to infection by micro organisms in the formation and increase in size of gall stones, the most reasonable method of treatment of the condition would seem to be to endeavor, if possible. to render the gall bladder aseptic, and the drug that suggests itself as likely to be of service in this way is Urotropine or one of its derivatives.

The value of Urotropine in infective conditions of the urinary tract has long been recognized. Horton Smith long ago showed that typhoid bacilluria readily yields almost invariably to its use. Although Although Nicolaier, who was the first to recommend its use in urinary infections, did not think that it had any effect in acid cystitis due to the bacillus coli communis, it is now regarded as one of the most efficient agents in treating that infection. In the pyelitis of children, for example, which is found to be almost always associated with the presence of the colon bacillus, alone or in combination with other organisms, Urotropine is of ihe greatest service.

Crowe has shown that the action of this drug on ihe gall bladder and pancreas is similar to that on the urinary tract; it is excreted unchanged or as formaldehype by the bile. In a distended gall bladder infected with bacillus typhosus, 15 grs. given daily gave a steriie culture at the end of ten days. In another case a massive dose of 75 grains gaye a sterile culture at the end of twenty-four hours.

Moynihan again has recorded a case of pancreatitis. in which the bacillus typhosus was found in the fluid from a fistula after drainage of the gall bladder. Fifteen grs. of Urotropine were given thrice daily, and eleven days afterwards no typhoid organisms could be found in the bile.

For over four years I have been using Urotropine in doses of from 7½ to 10 grs, three times daily in cases of gall-stone disease, and have records of twenty-four private cases thus treated. I am sorry to say that, through a misadventure, it has been impossible for me to obtain notes of hospital cases.

The diagnosis has been made upon the presence of severe intermittent or recurring pain in the hypochondriumt sometimes in the epigassrium, sometimes witn, sometimes withoui, jaundice, usually with pain in the

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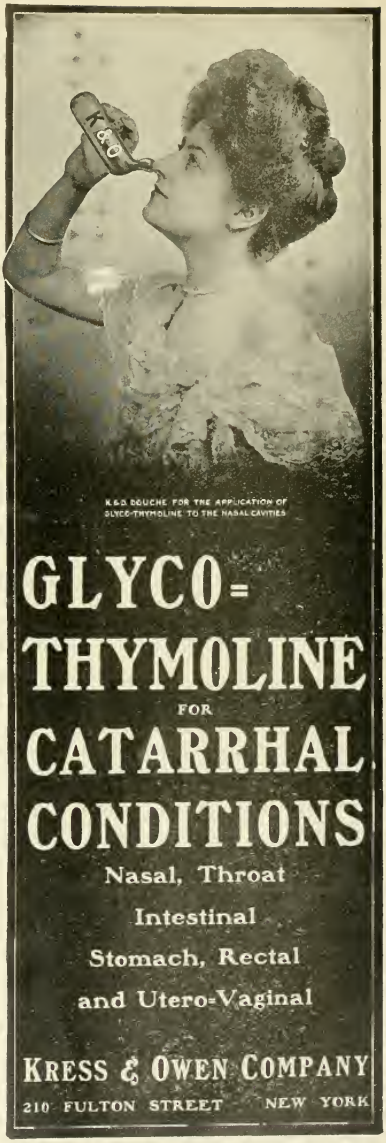

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right subscapular region, and tenderness in the posterior lower region, and at Naunyn's point, the outer edge of the right rectus muscle, opposite the tip of the ninth costal cartilage. In addition to Urotropine, I have administered, twice weekly, a pill of 1 gr. each of euonymiu and iridin; the latter is regarded by Rutherford as one of the most reliable of cholagogues.

Two of my patients—elderly ladies, aged seventy-eight and seventy respectively—have died of syncope and apoplexy two years aftet the commencement of treatment, and in each case there was no return of symptoms for the last eighteen months of symptoms for the last eighteen months of life. I know of several others who have been quite free from symptoms after a variable time from the beginning of treatment. Many of the cases have been lost sight of, and some of these I think I should have seen if symptoms had recurred.

Three of the number have undergone operations for their liver condition. In one case a lady of about forty, who had had repeated attacks of bitiary colic, was operated on thirteen days after the first administration of Urotropine. No definite stone was found in the gall bladder, but there was some gritty substance which suggested broken down gall-stones.

The second patient was a young lady who had had enteric fever two years previously, and who had had recurrent jaundice with every little pain, the diagnosis being doubtful. Urotropine was given for three weeks without result, and five weeks later operation took place. No gall-stone was found, and the symptoms did not improve after cholecystotomy. Later, the patient went to her home in the country, developed ascites, and eventually died in a little more than twelve months from the date of operation.

The third case was a young lady whom I saw temporarily sor a colleague during his absence from town. She was put on Urotropine, but I cannot say for how long it was continued. Six weeks later she was operated on, and a large single calculus removed from the gall bladder, After a prolonged illness she quite recovered.

One case was a feeble; elderly gentleman of over seventy, who had recurrent attacks of pain in the right hypochondrium for some weeks, with jaundice. When I saw him in consultation he was very ill, with fever up to 101°, a distinct right hypochondriac swelliug, and a leucocyte count of 10,000. Operation was advised and declined, and on my visiting him a second time a fortnight laler there was not much alteration in symptoms. The Urotropine was given in the usual doses, and a fortnight later he was said to be rid of his pain and jaundice, and to be getting about again.

I think there can be no doubt that, in addition to its disinfectant actiou on the urinary bladder in cases of enteric fever, Urotropine is likely to be of use in preventing infection in the gall-bladder, and so minimizing the danger of cholelithiasis after that disease; and it is well, therefore, to giue Urotropine as a routine treatment during convalescence from typhoid.

My experience inclines me to recommend tbe nse of Urotropinei together with the other dietetic and hygenic measu,es already mentioned. in early cases of cholelithiasis, or in cases where the indications for operation are not urgent. If operation has to follow, the antiseptic action of the drug on the bile may be helpful in preventing septic complication. We know, however, that in urinary sepis Urotropine cannot always be regarded as a specific, and it is not likely to be so in gall-bladder conditions. Even if we are able to produce a sterile condition of the gall bladder contents, there may be many conditions which call for operative interference, and the solution of a calculus may be too slow to admit of operative delay.

In conclusion, it is well for the physician to bear in mind the words of Mayo Robson:—"I hope the time is not far distant when it will be fully recognized that though cholelithiasis, so far as its cavses and its early treatment are concerned, is distinctly a condition for medical treatment, it is both unjust to the patient and unfair to the profession to continue medical treatment and to postpone surgical aid until serious complications supervene or the patient is almost, if not quite, past relief."

Recent Experiences in the Treatment of Favus.

Dally (British Medical Journal) believes that the following method of treatment given is the best.

On the day previous to the application of x rays the hair is cut quite short with clippers, which are then carefully sterilized, and the child's head is washed with soft soap. If many crusts or much suppuration are present, the head may be further cleansed by the application of cyllin poultices. X-rays are applied after the manner advocated by Kienbock. The hairy scalp is mapped out by taking five centers, each of which is not less than five inches from the ones adiacent, and by this means the whole scalp is epilated by five exposures, each case taking on the average about one hour. Protection for operator and nurse can be attained by the use of any suitable form of shield. By far the most satisfactory tubes

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in the experience of the writer are the Chabaud and the Drisles, the latter having the advantage of cheapness and of standing the passage of a greater amount of current. Eighteen days afterward the head is washed, by which time the hair has begun to fall out. A cyllin poultice is applied daily for the next three days, the head being washed daily after this for seven to ten days. By this time the scalp should present a billiard-ball appearance, and if there should be a few stumps still remaining, these are picked out individually with epilation forceps. Unless contraindicated, pure izal or cyllin is painted on once weekly. Should this prove too strong, solutions of greater dilution are employed, or ung. hyd. amm. dil. is rubbed in daily. A new growth of curly hair appears in about nine weeks' time, and by the end of three months is frequently half an inch in length.

If for any reason x ray treatment cannot be immediately applied, the disease may be held in check by the application of strong solutions of oxidized hydrocarbons, of which cyllin and izal are the best, since,

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although antiseptic and disinfectant, they are neither caustic nor toxic. The most useful ointment is one which consists of 50 per-cent oleate of copper ointment, together with a like quantity of an ointment of carbolic and salicylic acids.

Although as regards ringworm the author is in complete accord with the opinion that the x-rays is unnecessary for every case, since it is a frequent observation that many early and limited cases can be more speedily cured by effective ointment treatment, yet he thinks it will not be gainsaid that for favus x-rays should be advocated as the best possible treatment.

Pygopagus.

Boswell (British Medical Journal) reports this case as follows : Born last March at Lowestoft, in the county of Suffolk, England; the mother being a young English woman, aged twenty-one. "The birth of the sPecimen was not extremely difficult. The head of the smaller child presented in the left occipital anterior position, but did not come down at first, although forceps easily delivered it. On traction being made one was able to diagnosticate the condition by tearing the two children apart. Once the breach of the first child was delivered second child followed quite easily. The two children were seen to be alive during the labor, but expired before birth was complete. The weight of the specimen was six and three quarter pounds. The mother stated she had been pregnant almost nine months. The specimen consisted of two small children, which were joined together from their nipples downward. One child showed a condition of hydrops cranii, otherwise they appeared to be perfectly formed above the diaphragm, each having perfectly formed upper extremities. There was a single placenta, with a single cord attached to the monster. Each chiid had one fully formed leg, but beside these there was one finshaped appendage, which appeared to be two legs fused into one, making three lower extremities in all. There was one cloacal aperture, consisting of an upper portion which was apparently connected with a single bipartite uterus inside, with fully formed Falloppian tubes and ovaries, while the lower portion was apparently connected with a single rectum. There was also what appeared to be an attempt at the formation of two more ovaries and tubes further behind on the back wall. Each child had a fully formed stomach and duodenum, lying below two separate livers, which were fused in the middle line and are torn apart. Above the liver was a separate diaphragm in each case. Each child had separate large and small intestines, with a cæcum, and one well formed appendix; they joined into a common rectum, which led to a common anus, which was imperforate: the bowel being distended above. The four kidneys were separate, with four separate ureters, which all lead down to the space in front of the uterus and ended blindly. There was no formed bladder, but at the upper end of the cloaca there was a small fungating mass, which looked somewhat like an extroversion of the bladder. Each child had a well formed spleen, but in the case of the child with deformed head it was on the right side of the body. The organs within the thorax seemed normal, except that the child with the deformed head had an enlarged heart, with no ventricular septum. The thymus gland id both children was large

Intrathoracic Goiter.

Kreuzfuchs (Munch, med. Wochensch) says that intrathoracic goiter is not a rare disease, although its diagnosis without the use of the Roentgen ray is occasionally very difficult. The most important symptoms are dyspnea, cardiac palpitation, dysphagia, cough, hoarseness, stridor, redness and puffiness of the face, cyanosis of the lips, dilation of the veins in the neck and of the anterior upper portion of the thorax, dulness over the manubrium, and depression of the larynx. All these symptoms point particularly to the presence of intrathoracic goiter, if neither the condition of heart or lungs nor the simultaneous existence of goiter of the neck will explain the existing disorders. There is a form of intrathoracic goiter, however, which is unattended with any disturbances and may only be accidentally discovered by the x-ray, but even this is of some importance, as it may predispose to disease of the circulatory and respiratory organs. As regards the frequency of intrathoracic goiter, among 1,040 cases examined with the x-ray dur-

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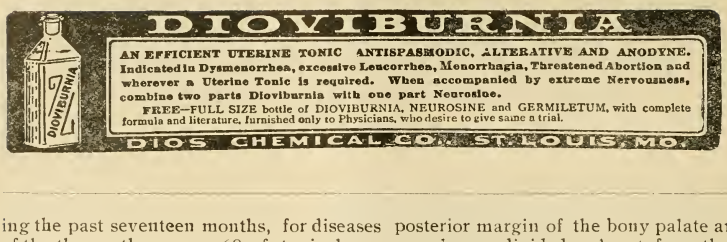
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ing the past seventeen months, for diseases of the thorax there were 68 of typical cervical goiter, of which 26, that is more than one-third, presented a complicating intrathoracic struma. In 21 the intrathoracic goiter was marked, while in 5 a portion of cervical goiter gland was found to protrude into the thoracic cavity. During this period 13 cases of true intrathoracic struma were observed.

Haemorrhagic Cystitis after Rectal Operations.

Hadda (Berlin Klinische Wochenschrift) calls attention to the frequency with which operations on the rectum are followed by blood in the urine and cystisis. Of 153 patients undergoing rectal operations ninety-four, or 61.4 per cent., had to be catheterised, and of these forty five, or nearly 50 per cent., had urinary trouble, that is to say, four had simple cystitis, forty had hæmorrhagic cystitis, or halmaturia without cystitis, and onehad an abcess of the prostate. The hæmaturia generally appeared from the third to the sixth day after the operation. In half of the cases the cystitis began with a severe hæmorrhage, with the other usual signs of inflammation of the bladder. At first the urine appeared to contain blood only, leucocytes appearing later. The hæmaturia generally ceased about the third to the fifth day, and after that there was only an ordinary catarrhal cystitis, which cleared up in the course of two or three weeks. The author attributes this complication to the anastomoses between the rectal and vesical veins, rendering easy the passage of germs from the one part to the other and facilitating thrombosis of the vesical venous ptexus. The Doctor suggests that the copro stasis which usually follows rectal operations may also cause a migration of bacilli through the intestinal walls.

Cleft Palate Operations.

Kirk (Brit. Med. Journal)has used a continuous suture in cleft palate operations with satisfactory results during the last three years. The operation he performs is the ordinary one with muco periosteal flaps in the case of the hard palate, and in the soft palate the latter is freed from the posterior margin of the bony palate and its muscles are divided. Apart from the ultimate good results obtained, it will be found that this continuous suture can be inserted more rapidly and easily than the interrupted one, and that the necessity for great care to insert the stitches exactly opposite each other and to tie the sutures with the correct amount of tension is obviated. The ease and rapidity of operation make it less serious, and it can be done when the child is 18 months old. The amount of tension to be put on this suture must be sufficient, after it has been put in and before it is finally tied, to prevent the escape of any bubbles from the nose to the mouth in any part of the line of suture, when the patient is breathing quietly. The suture should be put in close to the edges of the flaps, only taking up enough tissue to give a firm hold and not enough to invert the margins. The suturing is easiest done from before backwards. The form of needle used is a small Durham's cleft palate needle, bent at a right angle to the right, and this is inserted from below on the right side s, usually rethreading before each introduction. Only about ½in. of the silkworm gut should be passed through the eye of the needle, as the gut is apt to get frayed by the constant threading and unthreading. The suture can be left in for ten days or longer. The Dr. claims for the use of a continuous suture is that it gets rid of two of the causes of failure of union in cleft palate operations, namely: (1) imperfect apposition of the flap edges; (2) necrosis of the flap edges from stitch pressure, and that it considerably shortens the operation, thus materially diminishing its risk.

Operative Treatment of Renal and Vesical Tuberculosis.

Kummel (Therap. d. Gegenwart) believes in the active surgical intervention in the treatment of renal tuberculosis. He has performed 125 operations for this condition. These are classified as follows: Seven nephrotomies for disease of both kidneys, including one bilateral nephrotomy, and 113 nephrectomies for tuberculosis of one kidney. Of the latter twelve were operated upon before the introduction of the new methods of examination, with three

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deaths. Since the use of ureteral catheterization and tests of kidney function there have been 106 cases with four operative deaths. As to the end results, 18 patients died stxteen months after operation, and of the remaining 84, nine died in the first two to four years, one each after ten and thirteen years, three after an unknown period, while reports are wanting in regard to four. The other patients are alive and in the enjoyment of good health. Kummel's first case of nephrectomy for renal tuberculosis operated upon in 1888 was still alive a few years ago. He believes that even if improvement occurs without operation the patient is left with a kidney subject to pyonephritic processes with the risk of infection of the bladder and other portions of the body. Although the tuberculin treatment has yielded some good results in children, it must be remembered that renal tuberculosis in childhood is of a much milder type and seldom manifests itself by severe phenomena. Even these cases his experience has shown that a permanent cure is exceptional and recurrences are the rule. The presence of urine free from tubercle bacilli does not always point to a healthy condition of both kidneys, since ureter of one may be occluded and severe tuberculous changes or pyonephritis thus masked.

Tuberculous Hydropigenous Nephritis.

Landouzy and Bernard have published in La Presse Medieale a study of a form of kidney disease which, while presenting all the classical clinical manifestations of pa-

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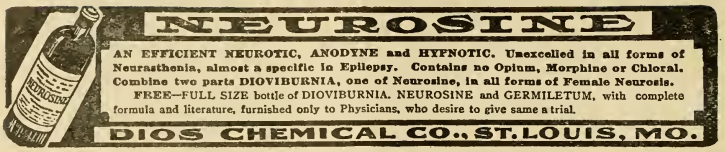
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renchymatous nephritis, is of tuberculous origin. Recent work has shown that the tubercle bacillus causes multiple and complex reactions in the region of the kidney which are manifested clinically in different forms. The onset of an infiltrating tuberculosis of the kidney is usually insidious, the first symptom to appear in most cases being œdena, which may occasionally amount to anasarca. The urine is abundant, contains albumin, and granular casts are present along with leucorytes and red blood cells in more or less large numbers. The tubercle bacillus may occasionally be detected, either by direct examination or as the result of inoculation. This association of hæmaturia with œdena is, in Bernard's opinion, peculiar to tuberculous nephritis. The title. "hydropigenous nephritis," would seem to fit the condition, and the most interesting cases are those in which it occurs primarily. Diagnosis is difficult, and death usually follows quickly. The renal tissue is permeable as regards all substances except sodium chloride. They have moreover succeeded in producing analogous lesions in the arterial systems of dogs and rabbits by inoculating them with the tubercle bacillus. Toxins did not produce the same effects, however. Treatment is very difficult, but tannin and calcium would seem to be doubly indicated in such cases by reason of the patient's renol lesion and tuberculosis.

Cause of General paralysis and Tabes.

Robertson (Journal of Mental Science) who is pathologist to the Scottish Asylums has found in sixteen consecutive cases of general paralysis an abundant growth on the nasal mucous membrane of a diphtheroid bacillus which he names the Bacillus paralyticans. To this organism, which is found in two forms, longus and brevis, he ascribes the symptoms of the disease, and he has discovered it also in the sheath of the second division of the fifth nerve and in the Gasserian ganglion. Within the brain of the paralytic, bacilli can be demonstrated in the majority of cases—sometimes in large numbers. Similarly he ascribes tabes to a special infected focus in the genito-urinary tract. Here there is usually a mixed infection of Bacillus paralyticans and coli. In early cases he believes that great benefit is to be obtained from the use of autogenous vaccines and anti-serum. He asserts that sufficient evidence has now acculated to show that general paralysis is a venereal disease, not only by its relation to previous syphilis but also in respect of the source of this bacterial infection, for Bacillus paralyticans also inhabit the endometrium, whence it is transferred to the male during sexual congress. The special vulnerability of the nose is ascribed to a weakening of the tissues there by sypilitic sclerosis. As regards tabes, there is no proof, he thinks, that syphilis is a constant antecedent, and many of the characteristic phenomena can be produced in animals by the action of these neurotoxic bacilli alone. In the discussion on this paper both Dr. Robertson's facts and his inferences were severely criticised, and the researches fo Dr. Lind, of Copenhagen, published in the same journal, traverse his bacteriological results completely. Organisms having the characteristics of B. paralyticans were occasionally found in paralytics and tabetics, but not more often than among normal individuals used as controls.

Missed Labor: placenta praevia.

As showing what apparent impossibilities may actually happen in connection with pregnancy and labour, a unique case reported in the Australasian Medical Journal is interesting. A married woman with four children, aged twenty-eight, came under the observation of Dr. Windeyer when about a week over the usual duration of pregnancy. Fœtal movements had ceased a few days, and for a fortnight there had been no increase in size of the abdomen; no fœtal heart sounds could be heard, nor fœtal parts palpated per abdomen. Projecting into the cervix was found a smooth hard mass about as large as a hen's egg, apparently continuous with a mass extending all round the cervix and preventing the palpation of the presenting fœtal parts. A diagnosis of fibroid of the upper part of the cervix was made, and it was decided to wait a while before interfering, so as to have less difficulty in delivering the macerated fœtus. Two months later an endeavor was

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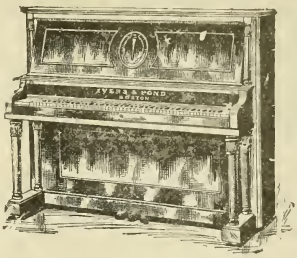

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made to induce labor by bougies, but it was impossible to insert one past the tumour. A week later laparotomy was performed, and the uterus opened. It then appeared that there was a complete central placenta prævia, and that a piece of the placenta jutted out into the cervix: it was this that had been taken for a fibroid. Missed labour itself is not very common, but in the case of central placanta prævia it is incomprehensible. The only hæmorrhages during gestation had been slight losses following vaginal examination.—The Hospital, London.

We are interested to note the recent consolidation of two very popular medical journals, the American Medical Compend and the Toledo Medical and Surgical Reporter. The name of the united medical journals is the American Medical Compound.

The first issue of this new journal was out in January, and that is only an index to what the editors expect to make subsequent issues.

The New York Post Graduate has plans and descriptions of its new School & Hospital, at the International Hygeine Exhibit at Dresden, Germany.

Table Jellies.

Beveridge in the Journal of the Royal Army Medical Corps points out the great value of meat and fruit jellies as articles of invalid diet. Gelatine itself, he remarks, is a protein sparer to an even greater degree than are fats and carbohydrates. Besides these protein-sparing qualities, gelatine is especially useful to the organism when in a poor state of health, for persons in a condition of low nitrogenous equilibrium profit especially by taking gelatine. Moreover, the latter is easy of digestion and has the power of fixing any excess of acidity in the stomach. Again, jellies contain a large amount of sugar, which is a true food; and the whole combination gives rise to considerable heat and energy. It is, therefore, not at all necessary to wait for convalescence before ordering jellies in most cases. After considering in detail the different forms in which jellies are marketed—in bottles, in tablets and as granulated powders—the author expresses his belief in the superiority of that made direct from calves' feet and eaten fresh. The author defines the essentials of a good table jelly as six in number. It must set at ordinary temperature (or in the tropics on ice); to secure this there must be at least 1 per cent. of

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gelatine, and there must be only very slight acidity. It must be as clear and transparent as possible to tempt the appetite best. It must be palatable and sharp to the taste; flavouring agents are admissible for this purpose. It must contain about 80 per cent of sugar. It must not contain any preservative, nor any albumin. Any colouring matter must be of a harmless kind, such as burnt sugar, saffron, cochineal. To these essentials may be added a seventh. The jelly must be supplied in an easily portable form in a casing which resists atmospheric changes. Ordinarily the paper packets in which calves' feet jellies are supplied are useless for the purpose of keeping the contents dry or preventing "shaling" in the jelly square.

The Docter as Patient.

"Physician heal thyself" is a phrase which almost irresistibly rises to the lips of some platitudinous person when the doctor himself becomes a patient. It is generally spoken in a tone of gentle raillery at the helplessness and inconsistency of the medical mind when the medical body is stretched upon a bed of sickness. It has much in common with the cheap sneer so often expressed by laymen when they find the "medical oracle" himself flouting some rule of health which he has laid down under certain circumstances for the guidance of others. When the doctor is ill it goes without saying that his patients are sorry for him in his affliction; but at the same time some of them will hint that it was just a little inconsiderate of him, if not a little incompetent as well, to leave his patients to the care of an outsider at such short notice. Illness is indeed a dreadful calamity for the practitioner, and it so often comes at a time of great mental and physical stress. It is small wonder, therefore, that he above all others—in spite of his special knowledge or because of it-should become particularly demoralized between the time when he suspects in himself the first vague symptoms of disease and the time when he knows that he is really ill and must give up work. He is too near his own case to judge of it clearly and calmly and deliberately. As likely as not he begins by tinkering half-heartedly at his system with a dozen remedies in quick succession, or else, with the disease working upon him, he runs hither and thither like a scared animal from one quarter of the pharmacopœia to another, until at last his poisoned wits dimly perceive that the matter is beyond him and other help is needed. Is it really surprising that doctors sometimes make bad patients, especially in the early stages of disease?—The Hospital London.

Turkish Court Physicians.

A case is about to come on for trial at Constantinople which shows that Abdul Hamid pushed somewhat to extremes his taste for experiments in anima vili. Some years back, at the height of his power, when one of his best-loved daughters fell ill with appendicitis, the Sultan declined to give permission for an operation to be performed upon the sultana before being shown exactly in what it consisted and that it was as simple a matter as had been made out. The court practitioners suddenly bethought themselves of a woman, an Ottoman subject, who was about to be discharged convalescent from the Italian hospital after suffering from some liver complaint. She was seized, taken to the Hamidia hospital, and, in the presence of the Sultan, her appendix was removed. The operation was a complete success, the patient, or rather the victim, recovering quickly, and the Sultan in consequence. allowed his daughter to be treated in similar fashion. To-day Abdul Hamid is banished, tongues are untied, and his victim is bringing action against the court physicians who risked her life by their experiment. The decision of the tribunal will be of interest. —London Hospital.

The Treatment of Erysipelas with Magnesium Sulphate.

In an extremely interesting paper Choksy refers to the work of Tucker of the Philadelphia General Hospital with magnesium sulphate in local inflammatory conditions and speaks of its value as follows:

Firstly, the drug can be obtained at any country store, is easily made into solution, is inexpensive, non-toxic, and clean; it is also easy of application if the directions are properly followed.

Secondly, the patient promptly obtains

The Charlotte Medical Journal

VOL. LXII CHARLOTTE, N. C., JUNE, 1911. No. 6

SALVARSAN, OR "606,"

In the Treatment of Syphilis, with Report of Cases.*

By W. L. Champion. M. D., Atlanta, Ga.

There has not been in recent years a discovery made that has attracted more attention than Ehrlich's Salvarsan or "606" for the treatment of syphilis. The impression is prevalent that one dose will thoroughly eradicate the infection. This may be true in a limited number of cases, but it will take some time to know if this can be accomplished, and also to know the true value of the preparation and the best method of administering it. This impression has already done harm, and if not corrected by the physician who administers the new remedy, the patient leaves with the false hope of a cure to return later with more serious evidences of the dread malady.

That Ehrlich has discovered a remedy which is distinctly in advance of any heretofore used in the treatment of syphilis, there can be no doubt. A single injection is equal to several weeks or months treatment with mercury, and the patient avoids the unpleasant task of taking medicine daily. Its action is prompt in cases where mercury has failed, and the gain in weight, improvement in appearance and feeling of well-being is frequently marked.

Where immediate action is needed we have in Salvarsan a valuable adjunct to our old and tried anti-syphilitic remedies. The promptness with which it destroys the spirochete, and causes the healing of mucus membrane lesions certainly makes the syphilitic less dangerous to society from the standpoint of infection. While mercury is destructive to the spirochete, it cannot be as effectual us Salvarsan, judging from the promptness with which lesions of the mucus membranes, skin and nervous system disappear.

That relapses will occur after a single dose there can be no doubt, as will be shown in the report of cases to follow. This fact will make it necessary to repeat the dose as each individual case may require, either from the return of symptoms, or a positive Wassermann reaction. I am using the preparation both intramuscularly and intravenously. When injected into the muscle it is slowly absorbed, and makes a hard mass that is sensitive to the touch for several days, and sometimes two or three weeks.

The freedom from pain after the intravenous injection gives it the advantage over the intramuscular, and the fact that it is thrown direct into the circulation makes its action more powerful and certain.

It is stated by Wechsellmann that the arsenic is eliminated more quickly when the preparation is administered intravenously—that is, in three days, while in the subcutaucous method it takes twelve to fourteen days. The fact that arsenic has been found in the gluteus muscle in patients brought to autopsy several weeks after having had an injection may account for some failures, the drug not being absorbed sufficiently.

With the discovery of the spirochete, the Wassermann reaction and Ehrlich's Salvarsan there has been awakened new interest in the management and treatment of syphilis that is invaluable to the human race, we now have a more definite idea as to when or whether a patient is cured.

The newspaper and magazine advertisements the new remedy brought forth, has aroused the old syphilitic, who has been taking his favorite prescription, or consulting the corner drug store man, to go to his physician for an examination, to have his blood tested, or get a dose of "606." While the sensational articles that have appeared in the lay press claiming a one-dose cure for syphilis have been harmful, the knowledge the public has gained and the interest manifested will be helpful, as I believe the education of the public in regard to venereal diseases, their dangers, prevention and proper treatment is the only solution of the problem.

With each dose of Salvarsan there are directions given how to prepare the mixture and how to administer it, which, if followed, will make the preparation harmless if used in the proper cases. In administering the dose intravenously I use a vein at the middle third of the fore arm, cocainize at the point of incision, expose the vein and make a slit large enough to admit a small canular. I use a canular in preference to a needle forced into the vein, so as to prevent the solution from escaping into the surrounding tissues. But this can be avoided when the needle is used, by having two containers, one with nomal salt solution and the other with the Salvarsan solution, using a three way stop cock, so as first to allow a small quantity of the salt solution to flow into the vein to see the needle is in proper position—then cut in the Salvarsan solution. It should re-

Read before Medical Association of Georgia, at Rome, April, 1911.

quire ten or fifteen minutes for the 250 or 300 cubic ceutimetres of the solution to flow into the vein.

For the intramuscular injection the solution or suspension should be neutral which will lessen the pain. I have not used a drop of acid in making the mixture in any case I have treated. Place the contents of an ampule in a glass mortar, add ten drops of caustic soda (15%) solution, rub well and then add five cubic centimetres of sterile water and mix thoroughly. The emulsion will be neutral nine times out of ten. If found acid add another drop of soda solution. The mixture when taken into the syringe for injection measures five cubic centimetres. I use a record syringe with a large platinum needle that will carry the suspension. Clean the gluteal region with alcohol, paint with tincture of iodine and inject deep into the upper and outer portion of the muscle. I insert the needle first so as to see that a vessel is not punctured, then connect the syringe and press the piston slowly until the syringe is empty, that is if the entire dose 0.6 gramme is to be given. Massage gently over the point of injection so as to distribute the solution. Of the large number of cases injected I have not had a single abcess, nor has it been necessary to open up any case at the sight of injection.

As advised I administered the remedy to the first six cases in the hospital, seeing no elevation of temperature, very little pain, in fact only three out of fifty-four were given morphia, so I gave the dose to the other patients in my office.

The fifty-four cases in this report are private patients that I have been able to keep in touch with since giving the remedy. As the report would be too lengthy to give all the cases in detail, only those of interest will be reported. Those cases that have shown a relapse I do not attribute to any fault in the technique of administering the drug, as it was given in the same manner as those in which there was such a rapid disappearance of symptoms, and still free of any evidence of the disease.

Case 1. Papulo-squamous circinate patches on face; arms and legs. Patient had taken mercury two months did not improve, January 26th, 0.6 gramme Salvarsan intramuscularly; January 29th, patches fading, and on January 31st, had disappeared. February 28th Wasserman negative; March 1st, sylphilide appeared on right ear; March 5th, patch ulcerated, put patient on injections of mercury and in two weeks no evidence of the trouble.

Case 2. January 23d, patient came for treatment with hard sore in meatus almost closing the canal; great difficulty in urinating; Wassermann positive. Patient not satisfied with result of blood test waited for further evidence. January 30th, marked sore throat, headache and macular eruption covering abdomen, back and arms. Same day patient was given 0.6 gramme Salvarsan. Throat symptoms disappeared in twenty-four hours, eruption on body in seventy two hours and sore in meatus healed in seven days. February 10th, Wassermann positive. February 11th, second dose of 0.6 gramme given. March 15th, Wassermann negative, April 15th, patient has no evidence of syphilis—apparently cured.

Case 3. Syphilis eleven months duration. Wasserman positive. January 31st, given 0 6 gramme Salvarsan. Five weeks later Wasserman negative. Has had no other treatment and ten weeks since dose was given, no evidence of trouble.

Case 4. Chancre in meatus and macular eruption covering entire body and extremeties. January 31st, given 0.6 gramme Salvarsan intramuscularly. In seventy-two hours the eruption had practically disappeared and chancre healing nicely. No other treatment given, and on April 15th, two and a half months after giving Salvarsan no evidence of syphilis, no Wassermann made.

Case 6. Syphilis five months duration, mucus patches on lips and tonsils ulcerated. February 5th, given 0.6 gramme Salvarsan. February 10th, ulcers had disappeared. February 13th, mucus patches appeared on lower lip, and on March 1st, syphilds appeared in palm of left hand. Patient put on mercury and syphilds disappeared in three weeks. April 16th, patient hoarse, administered 0.6 gramme Salvarson intravenously and on April 19th voice was normal.

Case 7. Contracted syphilis in July 1909, mercury and iodide taken about nine months. February 9th, 1911, noticed left foot turned inward; had lost control of ankle joint and toes; sensation lost in calf of leg; muscles flabby, and patient nervous and memory failing. Wassermann positive. February 9th, administered 0.6 gramme Salvarsan intramuscularly. February 13th, patient feeling better, regaining control of leg and foot and sensation returning. February 21st, had gained five pounds, foot and leg almost normal. March 9th, perfect use of leg and foot. Sensation normal and patient had gained fourteen pounds, Wassermann negative.

Case 13. Syphilis two months duration, both tonsils badly ulcerated, patches around anus and general glandular enlargement. Had been taking patent medicine called B. B. B. February 15th gave

0.6 gramme Salvarsan intramuscularly. February 17th, tonsils clean and healing and throat symtoms better, patches around anus not improved. March 3rd, throat symptoms returned. March 4th, second dose of 0.6 gramme Salvarsan. March 7th patient improving; March 15th, patches around anus healed. March 20th, tonsils ulcerated, put patient on mercury.

(*Case 41, No. 1.*)

(*Picture of patient taken april 3rd. the day he was given 0.6 9 gramme Salvarsan or "606" intraumuscularly.*)

Case 15. Student, syphilis six months duration. Had been given dose of Salvarsan by another physician three weeks before consulting me. The first dose cured syphilide of the palm, but did not improve the laryngitis which was very severe, nor patch on tongue. On February 16th gave patient 0.6 gramme of Salvarsan. February 20th, voice clearing up and on 26th, normal. On April 1st, two mucous patches appeared on lower lip. April 9th gave 0.6 gramme Salvarsan intravenously. April 13th, patches had disappeared and voice normal.

Case 17. Syphilis four years duration. Syphilis of tongue which had persisted in spite of mercury, potash, cacodylate of soda and a visit to Hot Springs. February 18th, 0.6 gramme Salvarsan. April 15th, no improvement.

Case 20. Upper and lower lips covered with mucous patches and sides of tongue ulcerated. February 19th full dose of Salvarsan. March 3rd, lips and tongue normal.

Case 26. Intense papular eruption covering both arms and legs, had been present two weeks. Patient had been treated several months before with mercury and potash. March 2nd, gave full dose of Salvarsan intramuscularly; March 16th, very little of eruption left, and March 27th skin clean.

Case 33. Syphilis fourteen months duration. Papulo-squamous patches on arms and legs. March 19th gave 0.5 gramme Salvarsan intravenously, March 25th patches gone.

Case 35. Physician, chancre on thumb in December, 1910. Took mercury badly. March 21st, laryngitis, very hoarse, throat ulcerated, pains in elbows and knees. Patient very nervous and had not slept in several nights. March 21st gave 0.6 gramme Salvarsan intramuscularly. In twenty-four hours voice clearing rapidly and in forty-eight hours practically normal. The pains in throat and joints were so quickly relieved that the patient slept well the first night after the injection. April 15th, no return of symptoms.

Case 36. Female, infected with syphilis in November, 1910. Had been given mercury and potash. Mucus patches in mouth

(*Case 41, No 2.*)

(*Same patient 13 days later.*)

and scaling syphilides of palms and soles. March 21st 0.5 gramme salvarsan; March 27th, month normal and syphilide on hands and feet disappearing. April 7th, patient apparently well.

CASE 41. Contracted syphilis in 1906, Wassermann positive, deep tubercular syphilide behind left ear and in neck, right elbow three inches larger than left. Patient was in constant pain and had slept very little in several weeks. The syphilide had been on neck and ear for three months. April 3rd, 0.6 gramme Salvarsan intramuscularly, In forty-eight hours the patient was free of pain and in seventy-two hours the sores were cleaned off and healing. Elbow that had swolled reduced one inch, On April 17th, two weeks after injection the sores were almost healed as the accompanying pictures will show.

As it has been only a few weeks since the drug has been administered to a number of the cases the Wasserman test has not been made.

One case of tabes with negative Wassermann, no improvement was noted. In another with a positive Wassermann, the pains were lessened, the patient gained in weight and was able to indulge his sexual appetite.

Of the fifty-four cases treated, ten had no lesions of the mucus membrane or skin where the effect of the drug could be watched, but these ten gave positive Wassermann or had evidences of the disease a few weeks before. Forty six had lesions at the time the drug was given, and all visible lesions healed in 43 cases, two improved, but did not heal entirely. Six cases out of the 54 relapsed, and were either given the second dose or put on mercury.

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Report of a Case of Parinaud's Conjunctivitis.

By J. G Johnston, M. D., Chester, S. C.

Mr. President and Gentlemen:—

The rarity of this disease is my only excuse for taking up your time with this report, as well as rapidly running over some of the more prominent symptoms. The case about to be reported was referred to me, and I saw at once that I had an entirely new disease to treat from any that I had ever seen; and as my attention had never been called to Parinaud's conjunctivitis, I had to rely upon my own initiative in the treatment.

Parinaud's conjunctivitis is a self-limited, infective, inflammation of the eyelids, with

* Read before the S. C., Medical Association, April 18-20, 1911, at Charleston, S. C.

the formation of large polypoid granulations on the conjuntival surfaces, together with marked swelling of the glands of that side of the face and neck. It is usually unilateral.

Cause:—Parinaud himself, believes it to be of animal origin. Of this I cannot speak authoritatively, but my patient, a boy of 14, and his dog were almost inseparable companions.

Symptoms: The lids were markedly swollen, and at first sight had the appearance of gonorrheal ophthalmia. The discharge, however, is free for only a very short time, and no gonococci can be found. This swelling takes place suddenly, and gradually passes away as the case progresses towards recovery. Upon examining the conjunctiva we find it the seat of large granulations, which may be on the ocular conjunctiva as well as on the lids. Sometimes these granulations are polypoid in character. Occasionally we have chemosis of the ocular conjunctiva. The cornea is unaffected, though such affection takes place occasionally. One of the prominent symptoms is the marked swelling of the glands of the face and neck of that side. These glands may be very tender on pressure, and seemingly would suppurate in spite of treatment, but such termination seems to be very rare.

Prognosis is good, as the disease tends to get well of itself; they usually recover in from two to six months. Personally I am of the opinion that they could be cured much more quickly if we saw them earlier, and could begin to treat them more promptly

As for treatment nitrate of silver seems to have the preference, though many other things, as sulphate of cepper, bi-chloride of mercury (1 percent), cyanide of mercury, (1-10,000), have been used. Some rely on surgery in clipping off the granulations; and once, at least, the whole of the affected conjunctiva, as well as the underlying tarsus (and, by the way, this tarsus was healthy) was removed. This is merely mentioned to show, that so far there is no unanimity of treatment.

M. N., age 14, was referred to me October 5, after having suffered for three or four weeks with an intractable condition of the right eye. I found the eye much swollen, in fact, almost closed, and the glands in front of the ear and along the neck enlarged. He was pale and lacked appetite. He was attending school, but work hurting the eye he was in the habit of wearing a black silk flap over it. There was some discoloration around the eye. On opening the lids, the conjunctiva was found covered with large flat, polypoid masses, some of them being more or less pedunculated. This was more noticeable on the lower lid, the conjunctiva on the upper looking more like simple elevations, but they lay so close together that they covered the whole surface. The cornea was not affected, nor did it become so at any time during the course of the disease. The pupil was normal throughout, as was also the iris.

At the time he was referred to me, he was simply using a boric acid wash and taking an iron tonic. I at once saw that this was something I had never seen before, and it was not until I had read an article on Parinaud's conjunctivitis in the January Ophthalmic Record that I recognized the nature of the trouble. This right eye was treated from October 4, until November 20, at first every day, then every other day, and finally twice a week until a normal condition was reached. He was allowed to continue his tonic and the boric acid wash, but in addition, after cocaining the eye, a vigorous application of a 2% solution of nitrate of silver was made by means of a cotton-wound applicator. The excess was washed off after having been left on for two or three minutes. The good effects of this line of treatment could be seen after about half a dozen treatments, but it was not until Nov. 20 that the eye condition was practically normal, although at that time the eye still had the appearance of being a little swollen. This appearance of swelling had entirely passed away by Christmas, and the eye has been normal ever since.

On December 3, or just about two weeks later, the left eye began to show signs of the same trouble. There was the same swollen look, with probably some slight swelling of the glands on that side of the face. The lesions of the conjunctiva were confined to the lower lid and the granulations were not nearly so large as in the other eye.

The same treatment was carried out in this as in the other eye, and in 20 days, or on Dec. 23, the left eye was also well, and has remained so until this time.

Whether the left eye was a genuine case of Parinaud's conjunctivitis, I can not say positively, yet it responded readily to treatment, which may have been due to the fact that treatment was instituted at once. There were certainly some things about it that led me to be lieve that it was going to be like the other one. I regret that I did not see the first one until it had been affected for some time, as I might have been able to speak positively of the last one. If the left eye was a genuine caee, it seems to teach that it can be controlled very much more readily when treatment is begun in the incipiency of the disease.

What It Costs.

By Ira M. Hardy, M. D., Washington, N. C.

Mr. President:—

I am very grateful to you and your Program Committee for this opportunity of expressing, not what I know about my discourse, but some views and thoughts I have concerning what I consider a much neglected duty our State and Medical Societies have failed to perform, in that they have taken no decided action looking to the establishment of a Training School for the care of our Feeble-Minded children, where they can be trained to do such work as will at least serve to keep them employed, if not to a large degree self-sustaining.

It was my intention to prepare as good a paper for this meeting of Physicians as I was capable of doing, but owing to severe illness in my family I have had but little time to devote to this labor of love. I trust, however, that my subject is one towards which every member present will turn his thoughts from now on. If my discourse meets with your approval, I desire to know it; if not, that it shall be criticised in such manner as your judgment shall suggest. It may seem strange to you that I should have selected this as my theme.

Four years ago takes me back to a visit I made to an institution of this kind at Vineland, New Jersey, and there had the pleasure of meeting that noble man, Mr. E. R. Johnson, who is conducting a New Jersey Training School for the Feeble-minded. Then the thought came to me, how I would like to see just such an institution as this in North Carolina. This same thought is more in my mind today than it was four years ago. I wondered while there why grand Old North Carolina could not, and did not, support just such an institution. I was proud to boast of the provisions she had made for the insane, deaf, dumb, blind and since, her epileptics. I am sorry, however, that up to this time no provision has been made for her Feeble-minded, despite the fact that such a provision was made in the State Constitution, Article 11, Section 9, as far back 1875, 32 years ago. In this respect, therefore, we are surely thirty-five years behind the times. I am pained that the Medical Society has taken no steps to agitate the establishment of such a school as our fathers anticipated that far back.

Now let's get a clear conception of what is meant by Feeble-minded: In considering these you must bear in mind that there is little distinction to be made between a high grade Feeble-minded child from which the most of our criminals come, and many of the normal children attending school throughout the country. There are, however, all grades of this condition, from the lowest idiot, absolutely incapable, unimprovable, unable to care for himself or herself in any way, to a high grade imbecile, which we call feeble-mindedness in its specific sense. Generically, the word feeble-minded means idiot, imbecile and feeble-minded. The marked cases are easily noted. Doctors, you have seen them. The microcephalic head with pointed vertex; the large square head of the hydrocephalic; slanting eyes, wrinkled and loose skin, fissured tongue of the Mongolian type; or the cleft palate, stubby hands and feet, projecting and irregular teeth of others of the genetous class. The listless or shifty eyes, the soft flabby hands, the unsteady gait, open mouth and generally poor coordination are signs. Poor attention and lack of concentration; lack of deliberation, reflection, reason, judgment and will may also be noted and are significant. Memory and imitation may be quite strong.

The instinct of hunger is often overdeveloped, leading to gormandizing; self-preservation is often lacking; they see no danger; apparent bravery is present because egotism overrides fear. The sexual instincts, while no stronger than normal, yet because not under the control of the will, lead to excess and perversions. Pleasure and pain affect them but little; jealousy and real courage are lacking; duty and obedience, veracity and shame appear only as intelligence advances. Affection is very strong, and the loving solicitude of many of these boys and girls who have grown to be large and strong is often very touching.

This, then, is the merest outline of the type of child with whom we should have to deal in the Institution I have in mind. His intelligence varies from that of the normal babe a few months old to a child of seven or eight years of age. With his immature and purposeless acts, his weak will, erroneous judgment, and want of perception of common propriety and morality, and a lacking of what is generally called "common sense" Brethren you see them. They are found in every community. They are not, as are the insane, considered dangerous to life, nor as criminals, dangerous to property, but they are looked upon as harmless and inoffensive creatures. As a matter of fact, however, the danger from them is greater, because often unnoticed. As these children grow up, the sexual instinct, uncontrolled by will and reason, they

*Read before the Seaboard Medical Society at Kinston, N. C., December 8th, 1910. Since reading the paper the legislature has appropriated the sum of $60,000 to begin erection of the North Carolina School for Feeble Minded.

become parents, in or out of wedlock, and their children are almost certain to be mentally defective; that is to say, they are feeble minded, idiotic, insane epileptics, blind, deaf, dumb, and sexually perverted. Any one of these defects may bring on another. In the absence of judgment and knowledge, these children are often misled and transgress the law. There is, therefore, danger of destruction to property and even life. The cost of trials and imprisonment; their inability to support themselves as they grow up, naturally makes of them tramps and paupers, to be supported in the most expensive way by the communities in which they live."

An institution such as I propose would prevent most of this. The right of procreation would be denied them; there would be no evil minded asssociates to lead them to transgress the law. Each one would be trained to contribute, in so far as he might be able, toward his own support. This institution would be, in the course of time, the least expensive method of providing for these unfortunates.

In the family these children are a constaut source of worry and pain. In the majority of cases the child's condition may be due due to accident, sickness or some cause of which the parents are ignorant, and for which they are in no wise to blame. It frequently happens, however that the second child is also affected, which is undoubtedly due to the presence in the family of the first child.

Practically the whole time of one member of the family is consumed in caring for the defective one. Five people in five different families to look after five different defective children. In the institution this would be different. One person would look after five children, thereby saving to society four workers, the number for which one attendant could care being commensurate with that degree of intellect the child or children consigned to his care might possess.

When the defective child is in the institution, the other children in the family are unaffected, and there grows in the hearts of brothers and sisters a love and tender solicitude for the absent, afflicted one, unalloyed by the embarrassment and disturbance of its presence. For these innocent, helpless, creatures the world offers nothing but rebuff and discouragement. Its ridicule is to them little less than torture. Its repression is sufficient of itself to cause mental deterioration. The neglect of the world still further weakens the body, mind and morals of the unfortunate child, and under these conditions they seldom live to be more than twenty years of age.

The Training School would offer light, happiness and opportunity for what little expressien they might have. There they would be trained to suit the child's ability. Entertainment would be provided, as would be in keeping with the child,s understanding. He would have employment to keep him contented. I have heard it said that "an idle brain is the devil's workshop."—It is more applicable to those mentally defective than to any class I know of.

The child should be rewarded to arouse his ambition. He should be provided with wholesome food and good clothing to keep him comfortable. With a weakened body invigorated, the feeble mind energized, his morals strengthened, this irresolute child will develop power to its fullest capacity. He would be surrounded by a pure and a clean environment. Life and joy would be his.

Everything that will be of benefit to him should be given him, save only the right to beget those l i k e unto himself. Science should give all it can to contribute to his advantage in this world. He should also be fitted, as well as possible, for that time when his loving father shall call him to that home where there is no weakness. Let us prepare a place for these unfortunates, for God says, "Inasmuch as ye have done it unto one of the least of these, ye have done it unto me."

The institution I propose would be the lowest step in our great system of Public Education, and would serve as a laboratory in which many great problems might be studied. Following the same path as the normal child only more slowly and under the eye of the scientist, facts in psychology and paidology may be developed. Questions of fatigue concentration and judgment, as well as questions of method and curriculum, which are so vital in the successful conduct of the normal child's education, may be answered here.

I am glad to see our Public and Graded Schools selecting teachers competent to train children in the special classes which are being established in great number in these schools throughout the country.

So much for a description of w h a t is meant by the Feebleminded. Let us now turn back to my subject, "What it Costs," or what the absence of an institution, such as I have described, and the consequent permitting of the class of unfortunates which I have been discussing to run at large, is costing our civilization, these idiots, imbeciles, epileptics, insane, inebriates, thieves, adulterous, murderous, and a l l classes of criminals.

The vast army in the United States costs us the great sum of $3,500,000 per day, or

$1,277,500,000 a year. North Carolina's pro rata part of this cost, according to population, is $28,390,000 per year. or more than is spent for every form of schools and churches within the borders of our State. The question then naturally arises, "What is our remedy?" I shall not undertake to give the full treatment but I can at least suggest a few doses of the remedy.

Let us build an institution such as I have described, and place into it these unfortunates early in their youth, who, if allowed to run at large, will most assuredly become criminals. Place them here where they can be trained to lead harmless, and more useful lives, denying to them only the right of procreation of his or her kind. This would be the end of propagation of feeble minded by feeble minded.

Now, for a moment, let us turn to those coming from the normal minded and see how their origin can be prevented. Normal minded people, by having diseased bodies, may have children that may be deaf, dumb, blind, imbecile, or even idiots. In this connection, to prevent such, I would urge that the profession agitate and educate the public up to the standard of having laws enacted looking to the establishment of a Board of Physicians in each county to examine applicants who contemplate marrying. Amend the law so that no license can be had only through this examining board. If these applicants are found to be physically able, grant them license to marry, otherwise reject them. The rejected, however, should have a State examining board to appeal to should he feel that he has not been given a fair and impartial examination. In other words, the system would be similar to our County and Supreme courts. Contrast, if you please, the diseased man and a virtuous woman marrying, spreading disease, and begetting those poor unfortunates, with unhealthy bodies and feeble minds, some blind, some lame, and, worst of all, transmitters of disease from generation to generation.

Doctors, I could not find words, were I to try, to impress upon you as family physicians the necessity for consulting with the fathers of virtuous maidens, pointing out to them the importance of not allowirg Tom, Dick and Harry to marry their daughters, without a full account of themselves as to character, sobriety, cleanliness and health. Why should she not be entitled to a man with a clean bill of health? Surely Tom, Dick and Harry require it of their choice. This system would give a great deal of dissatisfaction at first but when people have become educated to the necessity for it, it will do more for the advancement of health than anything I know of. Thousands of lives would be saved every year, which are now carried to their grave too soon.

Who feels like working when he is sick, diseased and unhealthy? When well, work it is a pleasure. With health improved, as the conditions would be, this world would be more fruitful and beautiful. God has given us preachers, good ones, to spread the gospel and treat our spiritual ills. God has likewise given us good doctors, to alleviate our physical pains and ills. Now let us pray to Him to give us knowledge, skill, and above all, COURAGE, to put in practice these disease preventing measures, and to live a moral life.

It is, however, very gratifying to know that a great many of the most inteiligent people of this country are getting closer and closer together on questions of public health and moral living. The safety of health, and the longevity of the human race depend upon this; and when this stage of perfection is reached, you will see your Insane asylums, Deaf, Dumb and Blind institutions having fewer inmates each year. Also, if you please, that army of criminals in chain gangs, in the penitentiary, and the vast number of criminal insane, will surely thin out; and all of this will come when our National Department of Public health is established, if it does for us in proportion what it has done for the cow, horse and swine.

We need this department of public health, so let us use our efforts to see that it is established. Why should man be overlooked? Is it because we are not as good as the horse and the cow? Not true. It is simply neglect on our part. I am glad to say that the representative from my district favors a National public health department, and I hope all of yours do. If they don't, try to arrange before the next primary to select a representative who does favor such a department. When this is established, there will be no special need of hookworm, bubonic, and white plague societies, these can be operated directly under the department of health to a greater degree of efficiency. These societies, however, are the best we have at present, and I favor their continuance until we can do better. They are accomplishing a great work under such leadership as Dr. Styles, Lewis, Rankin and Ferrall. I do not wish to lose this opportunity of thanking Mr. Rockeselller for his gifts to all branches of Medical Science, and especially for the eradicatiou of the hookworm. I wish that he had gotten up in such a good humor that morning that he had made it $10,000,000 instead of $1,000,000.

Every child comes into this world not of his own accord, but as an involuntary comer. Civilization therefore owes to it,

and is unworthy of the name of civilization unless it gives to it, the chance to be the very best man or woman it can under the circumstances, no matter what degree of intellect it may have to develop. Inasmuch as the State has made provision for the Insane, blind, deaf, and dumb, and established mammoth state schools for the highest type of its civilization and citizenship, now why not turn some attention to this type of unfortunates, a great many of whom cannot appreciate sight, taste and smell but whose little body may be kept clean and comfortable, thereby enabling many of them to live to be 60 or 80 years old.

These will always be children, and should be divided into classes, not by sizes or ages, but according to degrees of intellect, and of course there will always be feeble minded children as long as malaria, meningitis, infantile paralysis and scarlet fever last. Let us hope through our public health department to diminish these cases. It is estimated that from 1,000 to 2,000 such are already born in N. C., and that they will continue to be born for years to come. If, therefore, we make no provision for them, are we not responsible for the lives of those who are murdered by the feeble minded, as well as for criminal acts and sins which may be committed by feeble minds for whom we have made no provision.

Let us work and get busy. Take your light from under a bushel. Let it shine to the end, that we may not stop until such an institution is had in North Carolina. The time was never more ripe for the agitation of the question of taking care of the feeble minded. It should be advocated by the profession and the laity in a systematic and careful manner. It means the beginning of the separation of the chaff from the wheat, so to speak. Feeble minds cannot beget strong minds; neither can seed, sown by diseased men, beget strong and healthy children. The department of public health would prevent this; the home for the feeble minded would prevent procreation of its kind. We surely must take some action or see a steady decline, in intellect and power, of the human race. If this system is applicable to the hog, the cow, and the horse family, why not to the man family.

South Carolina, North Carolina, and Virginia have been foremost in medical law enactment and in the advancement of medical science. Now can we afford to have that said of us no more? Look at little New Jersey, only one crop a year can be raised, and see what she is doing in taking care of nearly 600 of its feeble minded, and 200 from other states, for nominal sums. One-fifth the size of North Carolina in area and resources. Then why cannot we take care of our feeble-minded, and have an institution as good as a state one-fifth of our size? Let us not be afraid. We are certainly going to meet with success, when North Carolina realizes what an important duty she has been neglecting. In time this institution will be sunshine and pleasure to the people of this grand old commonwealth, as well as in other states where the work is carried on to its greatest efficiency.

Thank God old North Carolina is a great state; has as good people as ever the sun shone on; good climate, good soil, good water, good crops, good counties and good towns. It possesses possibilities so great that it is not possible to conceive of what great things have ever been considered in the old North State, To my mind the greatest of these is the establishment of a Home Training School for the care of the feeble-minded.

PREVENTIVE MEDICINE.

What It Has Done, and What It Can Do, If the State Will but Recognize Its Obligations to the Public.

By Joseph A. White, A. M., M. D.,
Richmond, Va.

When his Satanic majesty destroyed the terrestrial paradise of the garden of Eden by inoculating Mother Eve with the germ of discontent, he sowed also other germs that have borne fruitful crops of disease, but he covered his seed so well that it has taken the medical profession all the thousands of years that intervened between then and about forty years ago to get upon the trail.

In Exodus, (chapter 15 verse 26,) it is recorded that Moses, the great lawgiver and physician said to his people, "If thou wilt hearken to the voice of the Lord thy God, and will do what is right in his sight, and will give ear to his commandments, and will keep all his statutes, I will put none of those diseases upon thee which I have brought uhon the Egyptians."

Here Moses foreshadowed Modern Preventive Medicine, inasmuch as he promised immunity from the infectious diseases then prevalent among the Egyptians, if his people obeyed the laws he laid down in regard to health and right living. Just as in these days if such laws are enforced or obeyed, we will escape the ills that come of their violation.

And for more than thirty years the medical profession, having once started on the correct trail, has been trying to commit professional suicide by directing all its efforts to the eradication of disease for the prolongation and conservation of human life.

It has made astounding discoveries of the

causes of disease' and its old traditions are gradually disappearing. Our age is one of wonderful progress in all departments of science and our profession is keeping pace with the age. Preventive medicine is the corner stone of our future achievements, and although it has already lengthened the average age of man in civilized communities, it is still in its infancy.

Its triumphs in the last decade, however, hold out hopes of greater things in the future, and as Dr. Osler has said in a recent article, "Man's Redemption of Man" lies in the successful work of this science. Its development into a special science is the result of the revolution in our conceptions of the nature of the maladies that have so afflicted the human race in the past, thus enabling us to take such measures, sanitary and otherwise as to prevent their spread.

The high rank attained by the medical profession of this day, its great importance in the public eye, is because of its power to prevent or avert disease, and not because of its ability to cure. How much this power would be enhanced, how much more it could accomplish in the domain of preventive medicine in this country, if our profession was represented in the central government with a special bureau "of sanitation and preventive medicine." presided over by a medical officer, as a member of the cabinet, can hardly be estimated.

The warfare against preventable disease, and every year we are adding more human afflictions to this category, would be more successfully waged, as appropriate legislation to this end would be enacted by the national and state governments.

When this is done and the necessary legal enactments enforced, fifty years hence will see many of the present scourges of the human race eradicated, and the time of man's life still more prolonged.

Less than fifty years ago, the germ theory of disease firrst saw light, and Lister and Pasteur were among its first exponents, but to Robert Koch we owe the solution of the connection between bacteria and infectious disease.

In 1876 he gave us his work on Anthrax.

In 1882 he discovered the bacillus of tuberculosis, and later gave us tuberculin as a means of diagnosis, and, according to some, an agent for immunization.

In 1883 he found the "coma-bacillus" of cholera, which resulted in practical preventive measures against iti spread, by recognizing the cases early, and isolating them.

In 1896 he confirmed Ronald Ross' discovery that the malarial parasite (the hemameba) was carried by mosquitoes (the anophales), and gave us the idea of its prevention, by the use of quinine to stop the development of the toxines.

His studies of Typhoid fever resulted in the present methods for its suppression.

More, therefore, than to any other one man, we are indebted to Robert Koch for the fundamental knowledge of the pathology of infectious diseases, upon which preventive medicine is founded.

Others have added much to this knowledge, that is of inestimable value:—

Neisser discovered the germ of gonorrhea in 1879.

Laveran, of Malaria, (hemameba) in 1880.

Eberth, the bacillus of Typhoid Fever (bacillus typho-abdominalis) in 1880.

Klebs, the germ of Diphtheria (Klebs-Lœffler bacillus), in 1883.

Kitasato, the germ of Tetanus, in 1889.

Castellani, of Sleeping sickness, (Trypanosome) in 1882.

Yersin, Bubonic plague, 1894.

Shiga, germ of Dysentery, 1898.

Weichselbaum, Cerebro spinal Meningitis, (diplococcus-intracellularis).

Schaudinn, germ of Syphilis, in 1905.

The demonstration by Reed, Carroll and Agramonte, of Dr. Carlos Finlay's hypothesis that yellow fever was transmitted by a species of mosquito (the stegomeia), as Koch had done in regard to malaria, made the method of its prevention a simple matter.

Yellow fever killed hundreds of thousands prior to 1900. Reed, Carroll, and Lazear experimented on themselves with the mosquito to confirm the above mentioned hypothesis, proved its accuracy and the sacrifice it entailed to themselves saved the lives of thousands.

Look at the results in Cuba and Brazil. Is there any greater achievement in human annals?

Panama, called the graveyard of the white man, has, because of the discoveries about malaria, been made as healthy, if not more so, as any city in the United States.

Could preventive medicine have any greater monument?

Equally successful warfare has been and is being waged with other infectious diseases.

Typhus fever has been practically eliminated.

Koch gave us the control of cholera.

The cause of typhoid fever being known, sanitary measures to keep the water free from contamination and the destruction of the house fly, its common carrier, go far towards its prevention.

TUBERCULOSIS.

Tuberculosis, one of the greatest of human plagues, has been robbed of half its

terrors since the discovery of its causation. Sanitary and preventive medicine has reduced its mortality at least 50%, and if it could be brought under such control as is possible with our modern methods rigidly applied, by appropriate laws, the so-called "great white plague" would be reduced to a minimum. We know how it is caused, how it is spread. and how it can be prevented, or even cured if taken in time, and yet for lack of such control, it is still killing more people than any other single disease,

A public campaign has been inaugurated in this country and has interested scores of people who are giving their aid to the medical profession in their efforts to stamp out this disease. This should be fruitful in results, but as Dr. Osler says, "the means instituted present difficulties, interwoven with the very fabric of society, but they are not insuperable, and are gradually disappearing."

PLAGUE.

The discovery that the plague was carried by rats and their attendant fleas has gone far towards its banishment from civilized communities, and the fight in California, since 1900, which resulted in its limitation to a small danger zone less than 40 miles square, shows what can be done. Its present death march through Manchuria is due to neglect of all of the simplest laws for limiting its spread.

CANCER.

Cancer is another of the human plagues that would be materially lessened by popular education on this subject. There are 80,000 cases, and 40,000 deaths anunally in these United States, half of which could have been readily cured by early diagnosis and appropriate treatment.

Nearly all acute diseases are due to bacterial infection, and bacteria cannot propagate on poor soil. Good sanitation is the reverse of good farming. Its object is to present as poor soil as possible to infectious agents, to do away with bad drainage, contaminated water, poorly constructed dwellings, overcrowding of human beings and overworking them, improper food, and the excessive use of stimulants, tobacco and drugs, and this can be accomplished in time by such legal means to this end as can be enforced.

The discovery of the specific germs of various diseases, and the laboratary investigations of them, brought about the development of protective inoculation and vaccine therapy on a scienfific basis, as presented by Pasteur in Rabies, Haffkine in Cholera. Behring in Diphtheria, Shiga in Dysentery, Flexner in cerebro-spinal Meningitis, Leishman and Chantemesse in Typhoid fever, Kitisato and others in Tetanus,and Yersin, in Plague.

Vaccination against typhoid fever is being experimented with and has been partially successful.*

The scientific applicatton of this principle to bacterial diseases, it is hoped, will ultimately give us such results that most of these diseases will be a thing of the past.

Most of the anti-bacterial serums thus far tried have not met with the success expected of them, except Flexner's serum for cerebro spinal meningitis, and probably the Pasteur treatment for rabies. Pasteur and Koch were the first to employ vaccine therapy, but Wright laid down the guiding principle of this treatment in establishing an index to determine the effect and course of the reaction, viz: the opsonic index.

Further investigation and experimentation may give us as great results from other anti-toxins as have been demonstrated in regard to diphtheria anti-toxin.

It is hoped that some day a specific will be found for every germ disease, that is a remedy that, when taken into the system, will destroy the disease germ without injuring the healthy tissues.

Protective inoculation, as in small pox, (Jenner) is to produce, artificially, a state of immunity against certain poisons that produce disease, by being inoculated with the bacteria, or bacterial products, of that disease; just as an attack of small pox, the scarlet fever, yellow fever, etc., protects against a subsequent attack.

The attack produces a certain anti-toxin that fortifies the system against the invasion of certain germs, or against the production of the toxins manufactured by these germs, that is, bacterial immunity is thus acquired naturally.

*In 1896, Pfeiffer did the pioneer work. Leishman in three years and a half prior to 1908 showed that of 5,473 vaccinated, only 21 took the disease, and two died; whereas of 6,610 not vaccinated, 187 took it and 26 died. In Peshawur, India, an epidemic in the army was cut short by vaccinating 70 per cent of the command.

In our own army, among 8,510 vaccinated, not one took the disease, although 200 among the unvaccinated were attacked.

"Carriers" have been cured by six inoculations. The vaccine produces specific anti bodies, which destroy typhoid bacilli. The injection is made subcutaneously, but no one should be vaccinated who is not perfectly healthy. First dose should be 500 000,000; second 1,000,000,000 ten days apart.

There is slight constitutional reaction, malaise and headache, local reaction, redness, etc., and sometimes tenderness of axillary glands Anaphylaxis (or increased susceptibility) has not been demonstrated. Length of time for immunity undetermined, but about six months. Uses, prevention when an epidemic exists—in families where a case is, in hospitals, army posts, etc.

So, also, act the anti-toxins which are substances injected into an individual to protect him against the toxins of a specific disease, and give an artificially acquired immunity.

But practically all the remedies which destroy living organisms in the body tissues are poisonous, and if the dose required to do this is so large as to be dangerous, it is useless, because to be of practical value it must destroy the offending organism, without injury to vital organs.

Remedies of this character are divided into vaccines (or serums), and chemical agents, or serum therapy and chemo-therapy.

Animal parasites, causing such diseases as malaria, trypano-somniasis (or sleeping sickness, amebic dysentery, syphilis, etc., canot be destroyed by any known serum-therapy, and must be made to yield to yield to such chemical agents as will render them non toxic, just as quinine has been used in malaria for many years.

In the last few years Ehrlich has done enough in this latter line of work to make him immortal, in addition to his discoveries in regard to toxin immunity.

Atoxyl was empirically shown to be useful in sleeping sickness but was found to be dangerous. Ehrlich, in experimenting with this substance in animals found a great number of derivatives (over 600) of which only a very few proved to be valuable in killing the parasites without damaging the organs of the animal. The most important of these were 418 arseno-phenylglycin for sleeping sickness, and No. 606, or arseno-benzol, for syphilis.

SLEEPING SICKNESS.

Trypano-somiasis, or sleeping sickness, is the scourge of Equatorial Africa, the germs of which are transmitted by the tsetse fly. Ehrlich's No. 418 has cured a large number of cases with one or two injections of a very small dose but the mode of usage and dosage is still in the experimental stage.

SYPHILIS.

Syyhilis has been known for 400 years, and done incalculable damage to the human race, but only in 1905 was its cause discovered by Schaudinn to be a germ known as spirochæte pallida of the parasite family of spirilla. Mercury and iodide of potash have a tendency to diminish the toxicity of these germs if not to destroy them, and have been our main dependence.

Ehrlich found the remedy that destroyed the tympanosome was useless in syphilis, and in further experiments discovered that the 606th derivative of atoxyl-arseno-benzol or salvarsan, caused the immediate disappearance of the spirochæte when injected into an infected rabbit. His late improvement of this drug, which is less toxic, is known as "hyper-ideal."

By its use syphilis has been made controllable and, to some extent, preventable. The spirochæte disappear in from 7 to 10 cays after injection. It acts by causing leucocytosis, and formation of antibodies.

Its early use cuts short the attack, and prevents secondary and tertiary symptoms in many cases, but not all. In syphilitic mothers, its use is said to prevent infection, and saves the child from its fatal inheritance. Thus far it has not done all that was expected of it, although it has made a remarkable record, and with further knowledge of its application it may meet all expectations. But it is an arsenical preparation and therefore poisonous and dangerous. It has caused hopeless blindness and produced other ill effects. It cannot be used by the patient, but only by a physician, as it must be given intra muscularly, preferably in the gluteal region, or by intravenous injections, and only to suitable subjects, as there are cases where it is contra-indicated.

The important question now at issue is, what dose should be given at different stages of the disease, and what is the best way of giving it?

The achievements in chemo-therapy have however been wonderful, and have opened up a great field for the alleviation of human suffering and prevention of disease.

Preventive medicine to be effective should begin at the beginning, in guarding the unborn child from hereditary trouble, in fact it should go behind ihis, and prevent the union of those unfit to propagate the species. As far as possible this is done in the animal and vegetable kingdoms, and the day may come when suitable legislation may accomplish the same among the human species, viz: only the breeding of the best from a physical and moral standpoint. This would only be an improvement on the old Spartan custom, of making way with all maimed, diseased or defective infants, to save the State the expense of rearing undesirable citizens,

Waiting for this much desired goal, the next best thing is prophylaxis in the puerperal state, as nearly all the diseases of the newborn are preventable, especially the infectious diseases, and here the question of regulation of midwives is an all important consideration: as thousands of women and children are annually sacrificed on the altar of the ignorance and incapacity of these women.

INFANT MORTALITY.

The question of infant mortality is a

burning issue at present, because of the heavy mortality the past summer; it has engaged the attention of our municipal authorities in most of our large cities, and in some of its aspects should be investigated by the state with a view to the prevention of the deplorable loss of life among our infant population. The babies of this generation are the material out of which the citizens of the next are made, and the state should give them proper protection. For instance, diphtheria still kills too many children, and physicians are partly responsible for it inasmuch as they do not or will not use the means of prevention that science has given them—the proper employment of anti-toxins ** In 1909 20,000 children in America died of diphtheria; statistics for 1910 were not available. Of these deaths 14,000 were attributable to the doctor's ignorance or carelessness. The death rate ought to be only 6 in 100,000 of the population, as it is in Paris, the effect of their admirable laws; and appropriate legislation would give us the same results. France is far ahead of us in measures to care for its infants, especially through the education of the mother. With a comparativaly small birth rate, it has no children to spare, and must guard well those it has.

Here it may asked if antitoxin is dangerous. Possibly in rare cases, when anaphylaxis has been produced by its use in a previous attack; within three weeks. It should then be used with caution or not at all, but these fatalities are so rare as hardly to be considered.

CEREBRO-SPINAL-MENINGITIS.

One of the greatest triumphs of preventive medicine in reducing infant mortality is the control of that terrible malady of childhood cerebro-spinal meningitis, by the isolation of the specific germ (the diplococcus-intra-cellularis) and the later discovery of a serum by Dr. Flexner to neutralize or prevent the toxines.

SCHOOL HYGIENE.

School hygiene plays an important part in prevcutive medicine, The systematic examination of school children that has been inaugurated in many of our cities, and which should, by state legislation, be made compulsory in all schools, goes far to safeguard these little ones against the evil result of overlooking the various affections of the eye, ear, and throat. Impairment of vision is discovered in time to correct any existing astigmatism, and prevent the diseased condition known as progressive myopia or near sight, as also the asthenopia or weak eyes, so often due to some systemic condition, of which it is only a symptom. The correction of impaired vision by the adaptation of glasses is not, therefore, the only remedy, because the impairment may be the result of some constitutional condition that requires investigation and treatment. But the prescribing of glasses is of as much importance as prescribing drugs, and no one but a trained physician should be allowed to do this work. The effect of eye strain on the nervous system of the child, and the many resulting disorders of mind and body that follow from neglecting or improoerly treating the eye trouble that causes it, have been so well demonstrated again and again by scientific investigation that it seems superfluous to refer to it here. Yet I feel constrained to do so because of the well-known disregard of such an important matter by our health authorities and the state. The public should receive appropriate education along these lines, and the state should restrict the adaptation of glasses to those competent to prescribe them if we would protect these children from the evil consequences of misfit lenses.

Nasal obstruction, and its serious complications of mouth breathing, and commencing deafness are discovered, and the treatment applied early enough to prevent damaging consequences of its neglect.

Preventive surgery has its field, as well as preventive medicine, and there is no more important work in this line than the early removal of adenoids, if obstructive to normal breathing, and of the tonsils, when they have given trouble, and show evidence of being a menace to the organism as a focus of infection.

OPHTHALMIA NEONATORUM.

Among the preventable afflictions of the human race is the blindness resulting from the purulent ophthalmia of infants. This plague has been made the subject of special legislation by the A. M. A., which through its sub-committees in every state, has tried to get state laws for its suppression, and the Ruosell Sage foundation has appropriated money to aid in this work. It is readily preventable and every physician knows, or should know, its cause, its infectious character. its danger to sight, its prophylaxis, and its treatment when preventive measures have not been taken. When it occurs in the practice of any physician, it is due to his negligence or ignorance.

** In mild cases, 3,000 units is the initial dose in the first 24 hours, 6,000 units if 36 hours have elapsed; and in 8 hours, if no marked improvement, same or larger dose, to be repeated every 6 or 8 hours until convalescence. The cost of production of 6,000 units is about 35 cents, and sells for $10, and at least $30 worth is required for any case, practically prohibitive for the poor, unless the State puts it within their means. and in some localities this is being done'

Therefore every case is a disgrace to the profession, and a blot on our civilization. Think of it! 60,000 blind persons in the United States of which 20% to 45% are blind from "ophthalmia neonatorum"—brind because of the culpable negligence of members of our profession, or because of the ignorance of the midwives, who have officiated at the births in place of the physicans. What a commentary on modern, up-to-date preventive medicine.

Should not something be done to make our preventive knowledge effective, and to save the sight of these little ones? A campaign of education should be instituted among physicians to awaken them to the importance of this subject, the public made to understand what it is, and what should be done to prevent it, and among midwives to make them appreciate one of their most essential duties in their attendance upon a birth.

Legal enactment should be passed in every state, making birth reports obligatory (a most important factor in vital statistics) within 36 hours by whoever presides at the birth, and, in addition, a report within *six hours* if any eye trouble manifests itself.

Midwives should be placed under legal control, by requiring them to be registered, and licensed, and to meet certain requirements before being registered, and to be held responsible for neglect in reporting births or ophthalmia promptly, under penalty of losing their license.

Both physicians and midwives should be compelled to use the prophylactic treatment in all infant's eyes at birth, and this can only be accomplished by proper legislation, as has already been done in some states.

Why should Virginia and the Carolinas be behind in this importantant work?

The profession of these three states could do much toward having the needed legislation passed, and this association would be an important factor in such a crusade.

DEFECTIVE VISION.

Take also the question of increasing defective vision among adults, where preventive measures have such a fertile ffeld.

Mr. John Darch stated before the congress of the Royal Sanitary Institute, recently held at Brighton, England, that "defective vision was the outcome of ill-regulated civilization, and it is estimated that about half the students and close working classes are sufferers therefrom in one way or another. Insufficient, or improper lighting in schools, offices, and workshops, is largely responsible for the increase of myopia, astigmatism, and their attendant nerve troubles."

If the state would enact some legislative regulations to compel adequate lighting oi all places where close work is carried on. it would prevent many of these troubles, That the state has the right and the power to do this, if it will recognize its duty, is unquestioned. The subject of proper illumination of all places where people congregate and work should be as much considered by the state authorities as proper drainage.

It is as much the duty of the state to look out for the preservation of the health of its citizens, as for their protection from injury or robbery. That this is to a certain extent recognized is shown by the establishment of government, state, and civic health boards all over the civilized world. No one questions the right of the state to isolate persons suffering from contagious diseases, and to restrain their personal liberty to such an extent as may prevent others from being infected. This right should apply equally in all directions that can prevent diseased conditions of any kind, which might impair the usefulness of the citizens, or imperil the health of the community.

Recently a decision was rendered in Minnesota that a municipality was liable for deaths from typhoid fever if it carelessly allowed its water system to become polluted. Diseases are, however, contracted in other ways, as well, and most of them are unnecessary, being the result of ignorance of the commonest laws of health, and therefore are preventable. Prevention is the only treatment, because once contracted, quite a number are incurable.

When scientific medicine has discovered the cause of any diseases, and demonstrated that it can be controlled or prevented by certain measuaes provided these measures can be applied, it is the duty of the state to vest its health authorities with the power to enforce their application whenever and wherever needed.

As for example, compulsory vaccination for small pox, the compulsoty use of antitoxin in diphtheria, etc., just as we now have compulsory quarantine in well known infectious and contagious diseases by excluding or isolating persons who have been exposed to the risk of contagion The question of invasion of personal rights and personal liberty should never obtain in the case of the few when we consider the risk of the many.

Boards of health are doing much, but not enough, because of the lack of authority. Their work is all uphill work, because the protection of the public health often requires the individual to do what he is unwilling to do, and it is difficult to make him see the necessity of this unless some personal or family disaster, or affliction,

brings it home to himself. Fear, or affection often converts the obstructionist to a realization of the importance of health problems when no argument could convince him.

It is a strange commentary on human intelligence that there are regularly organized anti-vaccination societies, formed to combat vaccination against small pox; in fact to fight for the continuance of one of the most destructive of diseases, and in consequence many states lack a compulsory vaccination law.

When the public health authorities have the power and the means to enforce their orders for the protection of the community against disease, they can afford more efficient protection in this regard, than the courts and police could give against injury or robbery, as has been demonstrated in Cuba in the eradication of yellow fever, and in Panama, of malaria. With the power and the money to meet expenses the public health problems would be readily solved.

Funds to carry out their work are, in most cases lacking, because our governments, states, and municipalities are mostly niggardly in appropriating the means to do what should be done to prevent or control disease. Where did the means for the campaign against hookworm disease come from? Not from the states where it was prevalent.

Germany is far ahead of us in this respect, and its government gives liberally towards scientific investigation into the causes and control of disease in its Universities and Hospitals, and to its public health authorities in the practical application of the results of such investigation

Look at the names of the discoverers of the causes of disease. Not an American among them, because of lack of means and facilities for making the necessary investigations

The public health, in all its aspects should receive as much attention from the national and state governments as questions of policy finance, commerce, etc., if from no other motive than that of the pocket, towit, from an economic standpoint.

If the citizen is diseased, his usefulness is curtailed; if, as a result of disease, he is maimed, crippled, or blinded, he often becomes a burden to the community; if his life thereby is cut short, his services are ended. Has any one ever calculated the economic loss to the country that might be materially reduced by giving the same attention to the preservation of the human species as is given to animals. It must amount to millions annually, if we figure that every individual life has an actual value in the work it is supposed to do in the community.

Sooner or later the day will come when the value of human life will outweigh all other considerations, and the battle against disease which modern preventive medicine has inaugurated. will enlist all the people when they are made to realize its importance to themselves individually, in the present, and to the human race at large in the future.

NITRQUS OXIDE OXYGEN ANESTHESIA.

By Southgate Leigh, M. D., Norfolk, Va., Surgeon-in-charge, Sarah Leigh Hospital,

One of the brightest signs of the times in the Surgical world, in this Country at least, is the earnest attention being paid by the profession in minimizing the dangers of Anesthesia, and removing its disagreeable and obnoxious features.

The use of Nitrous Oxide Gas mixed with Oxygen, although not yet fully developed in its mode of administration, is still well enough known, and has been sufficently tested, to make the careful surgeon feel that at last he has found a general Anesthetic which is practically devoid of danger. either immediate or remote, and which is free from all disagreeable features.

The deep interest which I have always felt in the use of "Laughing Gas," ever since I first began to do Surgical work is the motive which impels me to present the subject to the notice of this society, rather than any expectation of presenting anything especially new or original.

Nitrous Oxide, or more properly speaking, Nitrogen Monoxide N 2 O, is a colorless gas, of a pleasant sweetish taste and with practically no odor. It is prepared by heating Ammonium Nitrate to a temperature not exceeding 400° F. decomposing it into an aqueous vapor and N2O. The Gas is readily compressed to a liquid, which being stored in steel cylinders renders the preparation easy to transport. Releasing the pressure immediately converts the liquid back into a gas.

Although discovered by Priestly in 1776, and its remarkable exilarating properties noted by Davy in 1800, it was not until 1844 that it was first introduced by Wells as an Anesthetizing agent. Two years later Ether and the year after that Chloroform being brought to the notice of the profession, and meeting with much favor, Nitrous Oxide was almost lost sight of,

Read Before the Tri-State Medical Association at Raleigh, N. C., February 23, 1911.

and seems to have been but little used until 1863 when Cotter revived interest in it. In 1868 Andrews suggested the mixing with air and prolonging the time of Anesthesia.

Until sometime in the Nineties its use was confined almost entirely to Dentists in the extraction of teeth, the time of unconsciousness being very short. Then it was taken up by a few members of our profession, and especially by Bevan of Chicago, and Bennett of New York. It was quite popular for a while preceding Ether anesthesia, and Bevan used it mixed with air in many major operations, requiring from 30 to 60 minutes.

In 1908 Reams, a dental surgeon of Chicago, reported in eighteen years having used Nitrous Oxide 30,000 times without an accident, and mentioned an office in Philadelphia were it had been administered 300,000 times with no bad results.

Bevan estimated the relative danger of the anesthetics Chloroform, Ether and Nitrous Oxide, as follows:

Chloroform showing a mortality of 1 in 2,000.
Ether ,, ,, 1,, 5,000.
Nitrous Oxide ,, ,, 1,,50,000.

That Nitrous Oxide has not been used more extensively in surgery is due to the following facts.

First: The deep Cynosis produced by the unmixed gas undoubtedly has prejudiced the surgeon against its employment, although the dentists have not seemed to share this fear.

Second: It is quite expensive, costing when used freely from $6.00 to $8.00 an hour.

Third: The usual apparatus is cumbersome and its administration for prolonged operations requires a skilled Anesthetizer.

Personally I first become interested in Nitrous Oxide Gas in 1890 while House Surgeon at Mount Sinai Hospital in New York City. I had the good fortune to meet with Dr. Hasbrouck, a dentist on Broadway who made a specialty of extracting teeth under gas. I witnessed a good deal of his work and was much impressed by the ease of administration, the absence of unpleasant results, and the fact that the doctor administered the gas without fear to patients of all ages and conditions of health. He stated to me that in his wide experience he had never had a single bad result.

Failing to interest the hospital authorities I purchased myself a portable apparatus and used it successfully on a number of cases of various kinds, but none of them for more than a few minutes. My experiments came to an end on account of the expense which I did not feel justified in continuing.

When I began work in Norfolk I resumed the use of gas in minor operations and have continued it up to the present time.

When the Bennett apparutus came into use about seven or eight years ago, gas was extensively employed by us, replacing chloroform in starting our ether anesthesias. The patient was first put to sleep with gas, then a gradual change was made to ether; and when well under, the apparatus was removed and ether continued, with an old fashioned ether cone made of newspaper and towel. The advantages of this method were, first, the substitution of a safe anesthetic, gas, for a more or less unsafe one, chloroform, to begin the anesthesia. (Up to that time in most of our cases we began with chloroform and then changed to ether.) Second, the gas was very pleasant to the patient, whereas beginning with ether by the then practiced method was most obnoxious. Third, anesthesia was more quickly produced and less ether was employed.

We are still using this method of anesthesia to some extent, though during the past two years, the drop method of administering ether having relieved that drug of much of its unpleasant effects, we are beginning most of our cases with ether administered slowly on the open inhaler, and by the drop method.

During the same time and coincident with other workers along the same line, we have been gradually developing the use of gas mixed with oxygen in operations requiring a longer time and a quieter anesthesia.

Our apparatus, too, has been gradually developed, until now we believe we have reached a stage where practically any operation requiring a reasonable length of time may be successfully performed under gas oxygen anesthesia, with practically no danger, and with hardly any discomfort to the patient. Our work in this line during the past few years has been entirely in the hands of my associate, Dr. Culpepper, who has made a deep study of nitrous oxide, and whose results will compare favorably with any that I have either read or heard of. Dr. Culpepper will shortly make a more detailed report of the work.

We practiced re-breathing of the gases before the appearance of Gatch's report and noticed its good results. Our apparatuses, however, have not been as economical in the use of the gas.

Gatch claims, and demonstrates, that a moderate amount of carbon dioxide is beneficial to the patient, stimulating the respiratory center and preventing the advent of shock. He, therefore, practices rebreathing to a considerable extent, adding enough oxygen from time to time to keep the patient's color good. This method also cuts

down the cost of the gases to 1-4 or 1-5 of the cost by the old method.

Hamberger and Ewing, in 1908, in a series of experiments demonstrated that while chloroform and ether both caused marked changes in the blood, nitrous oxide produced none.

Recent observations with gas and oxygen show that there is no rise in the blood pressure, and on this account as well as the fact that there are practically no bad after effects, the mixture is being used with the aged. Indeed it is being employed satisfactorily with patients of all ages, in desperate conditions, and in obstetrics.

Unfortunately, no satisfactory apparatus has, as yet been placed on the market, but a number of anesthetists have each been perfecting his own special arrangement, but all along the same lines.

Our present apparatus gotten together by Dr. Culpepper consists of a bag, a mixing chamber, and a mouthpiece. There are three cylinders, one of oxygen and two of nitrous oxide. Attached to the mixing chamber is a "drip cup," containing ether which may be added to the mixture, a few drops at a time, if required.

We formerly measured the proportion of oxygen, using 2% to 4%, but now, finding that unnecessary, depend on the patient's color as a guide.

For a long time we have done nearly all of our small operations under Gas, such as curetting, abscesses, etc. Of late we are doing laparotomies, and other operations requiring more time and more relaxation.

While, co-incidentally with other operations, we have been experimenting with nitrous oxide, yet the experiments have been along safe and rational lines, and have consisted more in developing and extending the use of the gas to a larger and still larger class of cases.

At present we are using gas in about half of our operations, and I believe with the perfecting of our methods we shall soon extend it so as to embrace a much larger proportion of cases.

We have employed nitrous oxide approximately 2,000 times, and have never as yet had a bad result. At times there is a little nausea, but if the stomach is well prepared and a small dose of morphia and atropia is administered beforehand, this is reduced to a minimum.

We have noticed no bad effects on the pulse. The patients, as a rule, go under in about 30 seconds, and consciousness is regained quickly and with rarely any excitement. To the patient the anesthetic is pleasant in taste and in effect.

There is less shock from the operation by this method than with ether or chloroform. The only disadvantages are that it requires a skilled manipulator and that the expense is considerably greater than with the other anesthetics.

At the present stage of our knowledge, we may say that we seem to, at last, have developed a method of anesthetizing, which is pleasant and devoid of danger, either immediate or remote.

I doubt not that later developments will produce an apparatus that may be easily handled and less costly to conduct.

What a wonderful advance over the methods of twenty years ago, when in the practice of some of the best surgeons, the most barbarous methods of etherizing were in vogue. Then not only were many irritating effects produced, but the impression on the patient's mind was so bad that surgery was kept almost in disrepnte with the public. Now, with nitrous oxide oxygen, there is practically no danger of any kind, hardly any fear on the part of the patient, and the impression made on the minds of the people is that the profession is studiously and carefully looking after their comfort and safety.

NOTE. Since reading this paper, I have used the Nitrous-oxide-oxygen method in practically all of my cases, including various abdominal operations, such as hysterectomies, gall-bladder operations, and appendectomies. The results have been perfect. No disagreeable or depressing effects on the patient, smooth anesthesia, complete relaxation and almost immediate return to consciousness.

By practicing re-breathing to a moderate extent, the cost has been reuced to and average of about 50 cents.

The Treatment of Pulmonary Tuberculosis by Artificial Pneumothorax.

By Mary E Lapham, M. D., Highlands Camp Sanatorium, Highlands, N. C.

An artificial pneumothorax is made by injecting nitrogen into the pleural cavity. This is as easy as the withdrawal of a pleural effusion. The needle is inserted, the nitrogen turned on, the needle withdrawn and the puncture sealed with adhesive.

What does the nitrogen accomplish? Pressure. A steady, even, elastic pressure, like that of a compress, over all the surface of the lung, gradually forcing it up together into the smallest possible space; crowding out all caseating, decomposing materials; obliterating all tubercular processes; converting the tubercular lesions into firm cicatricial tissue and leaving the sound portions of the lung unaffected, and able to retume their function after the pressure is removed. The clinical effects correspond

to the compression of the lung. At first there may be an increase in temperature, pulse rate, respiration, coughing and amount of sputum, which is followed by a corresponding reduction in all the symptoms, accompanied by a gain in weight and strength. Typical cases for the method are those with the whole of one lung involved and riddled with destructive foci. High fever, drenching night sweats, profound exhaustion and emaciation, and profuse, purulent expectoration containing quantities of elastic fibres and tubercle bacilli. If an artificial pneumothorax can restore such a patient to health and work does it not deserve careful consideration, rather than a sweeping rejection as "too radical"?

If a case of pulmonary tuberculosis does not do well under symptomatic or tuberculin treatment, shall we let the patient die or try to remove the foul contents of bronchiectatic areas and cavities just as we would drain an abcess in any other part of the body? If we can possibly accomplish, by a bloodless operation practically devoid of danger, the removal of a diseased lung, gradually and imperceptibly and almost without the consciousness of the patient, is it not worth trying?

The technic is not difficult and the apparatus is simplicity itself. Murphy's apparatus is described in the J. A. M. A. for 1898. The points of most importance are: First, the production of a pleural cavity. Second, the maintenance of the correct amount of pressure upon the surface of the lung until the tubercular lesions are converted into scar tissue. A pleural cavity can always be produced if there are no pleural adhesions, that is, if the pleural surfaces are free so that they can be easily separated. Normally there is no pleural cavity, but as soon as the costal pleura is punctured so as to transmit the outside pressure of the air, it enters promptly—the lung collapses and falls back out of the way. With free pleural surfaces there is practically no danger of puncturing the lung, but if they are adherent the needle pierces the pleurae as if they were one and enters the lung. There is, however, very little harm done. You know that the needle is in the lung because no air is heard passing through its head and you simply withdraw the needle and make another trial elsewhere. The lung is not injured and the pleurae are not injured because their surfaces do not exist. If they are universally adherent no cavity can be produced, but adherent and non-adherent, surfaces are found in the closest proximity and many attempts may have to be made before finding a cavity. Murpey made three attempts upon a case of mine. Forlanini tried twenty-eight times upon one case before succeeding.

The greatest probability of free surfaces is over good resonance and breath sounds. Keep as far from the diaphragm and cardiac area as possible. Avoid the thicker muscles and choose a wide intercostal space. Paint the perfectly dry skin with tincture of iodine. With the left hand stretch the skin tightly across the interspace, freeze with ethel chloride and make a small incision, just large enough to admit a medium size aspiration needle, which is thrust through the pleura. As soon as the pleura is pierced air is heard hissing through the head of the needle. If not, withdraw the needle a little and have the patient cough in order to open up the needle. If after repeated trials, no air enters the needle another attempt must be made elsewhere, possibly not more than an inch away. When the air is heard, turn on the nitrogen and admit just enough to keep the pleurae well separated, but not enough to cause any discomfort to the patient,—from 200-400 c.c. Seal the wound with collodion and draw the edges together with adhesive.

The subsequent maintenance of a persistent even pressure so as to compress the lung without inconveniencing the patient, requires an adjustment between the amount of force used and the resistance of the tissues transmitting this force.

The amount of infiltration in the lung and the extent to which it is held ont by pleural adhesions determine the amount of force and the length of time necessary to compress the lung.

The mediastinal pleura is relatively unsupported, and if too much pressure is used it will leak and the nitrogen will escape into the mediastinal tissues. This will cause deep emphysemas, with a sense of pain, oppression and suffocation, reaching from the diaphragm to the throat, and an uncomfortable heart action, while the nitrogen will also force its way through the tiny puncture wound, causing subcutaneous emphysemas which are disagreeable, although not dangerous. The frequency and the amount of the subsequent fillings are determined by clinical and physical findings. We try to abolish the breath sounds. First the rales disappear, then comes loud, metallic breathing, then a metallic click, and finally the sound as of a drop falling into a metallic space. If, in trying to abolish the breath sounds, we run the risk of upsetting the heart action, the digestion and respiration; if the patient feels weak, tired, nauseated, cannot eat or sleep, and complains of difficulty in

breathing, then nothing more should be attempted until the patient has recovered. Nothing is gained and all lost by trying to force the process. Begin every other day putting in small quantities of nitrogen, because, until the lung is compressed, it will yield a little and this removes the pressure, which must be frequently renewed.

This means, theoretically, every other day or twice a week, but, practically, clinical signs may interfere, and say when the next filling shall be made. Throughout the course of the treatment avoid upsetting the patient and depressing the action of the heart. Slowly and persistently compress the lung, with as little consciousness as possible on the part of the patient, and then hold the lung firmly together until an anatomical recovery makes relapses impossible. After the lung is once compressed and does not yield any more, once a week, then once in two weeks, and finally once a month will be often enough to repeat the fillings. No incision is necessary for the fillings. Paint and freeze the skin, then slowly thrust in a fine hypodermoclysis needle, which will cause no more pain than a hypodermic injection. If the chest is small and the lung a good deal infiltrated 200 cc. of nitrogen will be enough—seal with collodion. Sometimes the passage of even so small a needle through the costal pleura will cause sufficient irritation to arouse a pleural reflex, or pleural eclampsia, as the French call it. Before the nitrogen is turned on the patient cries oui, "I feel badly. I cannot see." Then follows an appalling condition. The pupils contract, the respiration shallows and slows, the pulse fails, the skin mottles and the patient is cold and clammy. This condition may be over in a few moments or persist for thirty-six hours, It is best met by morphine, stimulants, and especially by breathing amonia. Its occurence does not necessitate giving up the treatment. Have the patient's bowels well moved; avoid the diaphragm, and give a preliminary hypodermic of morphine. The lung must be held well compressed for about a year in order to be certain that the lesions are well organized, so that no relapse can ever occur. Otherwise they will tear open when the lung re-expands and everything be lost.

Not all this time is necessarily lost from work. It may be quite practicable to go on with one's work after the lung is well compressed.

A young lawyer, with a relatively slight central lesion, could not hold his recovery. For a year under symptomatic and tuberculin treatment the physical signs would disappear only to return in full force whenever too much strain was put upon the lung. As he had a family to support and could not live in a glass house all his life, we compressed the lung. In two months he went back to work in his native town and has had no further difficulty.

A married woman, fifty years of age, was in bed with fever, hemorrhages, etc., for eighteen months. The left lung was totally involved and in the third interspace, an inch from the sternum, there was an area, about two c.c. in diameter, that rose and fell with inspiration and expiration. Over this area was amphoric breathing and large, wet rales. It seemed dangerous to attempt the compression of this lung for fear of bursting the walls of the cavity. Very cautiously and gradually we succeed in abolishing the cavity and getting the lung well crowded up together. After two months the patient was able to walk, to do the cooking for herself and daughter and felt better and stronger every day.

A young woman of twenty-five was so reduced in weight and strength, so frail and emaciated, that it seemed worse than useless to attempt any help. Fortunately the husband insisted and we began trying to compress the left lung, which was totally involved. Aside from the pain of tearing open pleural adhesions she suffered no inconvenience and her return to health and strength was little short of miraculous. After two months she was driving, picnicking, going out to tea. And this after a history of three years' steady loss.

An artificial pneumothorax is indicated in any case of pulmonary tuberculosis that cannot make, or cannot hold, a good recovery. It is simple in its application and not dangerous. It is logical in theory and precise in its results. So why should it not be tried in all cases not counter-indicated by some complication, such as diabetes, sufficient in itself to inhibit recovery? Slight involvement of the second lung is not a counter indication, as the removal of the toxins helps the second lung to recover.

THE MODIFICATION OF MOTHER'S MILK.

By Greer Baughman, M. D., Richmond, Va.,

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The fact that many infants are deprived of mother's milk and start their life on a substitute can often be traced to the doctor. At college he learns a great deal about the modification of cow's milk, but hears very little about the regulation of mother's milk.

The mother is, however, the greatest ob-

stacle to the nursing of her baby. Occasionally, this obstacle is absolutely insurmountable. Her social duties, her home duties, her outside work, all interfere in spite of the fact that there may be no physical reason why she might not nurse her baby. If married people can be brought to see that their main object in life is to have children and to rear them in such a way that the children will be better mentally, morally and physically than the parents, and if they can be shown the great advantage that the breast-fed children have over bottle-fed children, then nothing but physical disability will come between the infant and the mother's breast. J Madison Taylor and Francis F. Deming have recently emphasized the well known and interesting fact that the infant not only receives nourishment, but prohylaxis against disease from the serum of the mother's milk.

In order to understand the problem of modification of mother's milk it will be necessary briefly to review the microscopic anatomy and physiology of the human breast. The human breasts may be regarded as cutaneous glandular structures. Up to the age of twelve, the glands in the boy and the girl are identical. In the male there is a retrogression after this time; in the female they continue to grow and develop until after parturition. There is a marked difference in the microscopic picture of the functionating and non-functionating breast

When fully developed, the breast is made up of about twenty lobes separated by connective tissues. The lobes are made up of many lobes are made up of many lobules which are divided into tubular alveoli. Small duets are lined with simple, cilated epitheand form larger ducts. Shortly before emptying into the nipple, each duct widens to form a vesticle, the sinus lactiferus. The ducts are lined with simple, cibical epithelium except near the termination in the nipple where they are lined with startified. payment equithelium. The alveolars epthelium during rest is a single layer of cubical cells; at the beginning of secretion, fat globules appear at the distal end and they increase in size.

There are two theories as to the secretion of fat in the milk. Some think that the distal portion of the cell breaks off after undergoing fatty degeneration or infiilteration and forms the fat globule while the same cell goes through the same process again. It is a fact that some eells are destroyed and are later replaced by others. The more probably theory is, however, that the epithelieal cells select the fat, proteids, sugar, salts and water from the blood and pass them on as a secretion.

Benda describes basket cells between the membrana propria and the epithelial eells of the alveoli. These, he believes, are non striated muscle cells and their coulroetion tend to force the milk into the ducts.

K. Bosch has proved experimentally that secretion of milk is independent of the nervous system. He transplanted lacteal glands into the backs and found that these thanslated glands secreted after the animal was delivered. With extract of placenta and gravid ovary he was able to alicit a secretion of milk in animals, and in animals and a few clinical cases.

H. Crower ascribes great importance to the sucking of the nipple as the main factor in setting up the secretion of the mammary gland, and cites numerous cases that show that the mammary bland is, to a certain extent, independent of the genital organs, secreting milk when an infant was allowed to suck even before the termination of pregnancy. Mothers can leave their infants, says he, for weeks at a time and then be able to suckle them upon their return.

The only other glands that secrete fat are the sebaceous glands; and while the mammary gland does secrete besides fat, proteids, sugar, inorganic salts and water, still the fact that no other save the sebaceous glands secrete fat at once differentiates fat productions as its special function.

Under the title, "The Peristence of Cell Funetion and Its Bearing on Pathology," Professor William von Leube, of Wurzburg, discusses a subject that seems to have an important bearing upon the physiology of milk secretion. The underlying principle is that there is a well defined tendeney for each kind of cell to continue its work along certain characteristic lines which are determined for it during its organization and development. This is shown by the fact that many different kinds of stimuli acting on a cell will all cause the same effect; thus, the musous glands secrete mucin when stimulated by heat, cold, toxins, chemical or mechanical stimulants. The difference in the effect produced by the stimuli is quantitative rather than qualitative.

The problem of modification of mother's milk reduces itself to the proposition of so adjusting the stimuli to milk formation that the infant will thrive upon it. These stimuli are intervals of nursing, general exercise, massage, nervous condition and anxcity, food and drink, the baby's suction, and drugs. Some of these stimulate the retardation of milk secretion.

We must first know what normal or perfect mother's milk is. There is no perfect milk that will suit all cases. One infant will thrive on a milk that will retard the development of another. For that reason it is well for us to determine the normal milk for a particular infant by examining the mother's milk while the infant is thriving. But often we do not see the case until the infant is doing badly, so that it is necessary to have some sort of standard. This is obtained by taking the average of the milks upon which a number of infants seem to be thriving.

The average of the constituents of my case, where the infants have been doing wel, irrespective of the infont (it is generally believed that the milk should remain

about the same during the entire period of lactation) has been

Specific gravity	10.31
Fats	4.05
Proteids	4.22
Sugar	4 33
Salts	.20
Total solids	13.82

The variation in these averages has been specific gravity, 1029-1036; fats, 2.9-5; proteids, 3.55-5.20. The averages are here rather higher than those of other observers. My cases have been in private practice and all of them have been antive-born, white women.

If the infant is not thriving we must determine in what particular it varies from her normal; or, in the event that we do not know what her normal is, from the average that has been determined by our own experience or that of some one else. The variation will be in quantity, or quality or both.

Quntity. E. V. Davis, of Chicago, has worked out a very useful system for determining the quantity of milk that the infant is receiving. The infant is weighed before and after nursing, and the difference in weight is the amount it receives at a nursing. The weight of milk increases as the specific gravity increase. The weight for instance of an ounce of milk with specific quality of 1031 is 1.035. When we recall that the capacity of the average infant's stomach at birth is a scant ounce; at four weeks 2.35 ounces; at six months, 5.31, etc., we see an additional reason for wanting to to known when it has enough. The problem that the capacity of the average infant's stomach at birth is a scant ounce; at four weeks 2.35 ounces; at six months, 5.71, etc., we see an additional reason for wanting to know the amount taken at each feeding. The average infant is sufficiently intelligent to konw when it has enough. The problem is usually not to reduce the quantity but to increase it.

Quality. The constituents of mother's milk that vary materially and interfere with the nourishment of the infant are the fats and the proteids; the sugar and salts remain very constant.

We will now consider the methods of modifying milk that has been found to disagree with the infant.

Intervals of Nursing. Rotch and many other observers have reported that the shorter the intervals between nursings, the higher the specific gravity of the milk. When the intervals are lengthened the specific gravity is reduced. Simply by changing the intervals of nursing we are often able to make an infant thrive upon a milk which it was doing very badly before. We usually find that the intervals of nursing are very irregular and too close together unless the mother has been carefully instructed beforehand. Most of the infants that are doing poorly are getting milk that is too much concentrated. Case No. 1 illustrates the effect of shortening the intervals of feeding. The infant here had icterus and was not gaining in weight until the mother's milk wos modified.

General Exercise. The care of the infant weighs so heavily upon most mothers that they do not take enough exercise. This lack tends to increase the proteids. Oone of the most prompt and efficient methods of reducing proteids is to make the mother take out-door exercise. If that is not possible, then carefully directed gymnastics at home may be resorted to. The most useful sort of in-door exercises to the mother are those movements that tend to strengthen the abdominal muscles, which have been stretched during pregnancy and labor.

Massage.—General massage just as exercise reduces the proteids. Massage of the breasts tends to increase the flow of milk. Besides it is a very useful aid in opening up the milk ducts that have been closed with detritus and epithelium or where the overdistended acini will not expel the milk into the ducts.

Nervous Condition and Anxiety.—These are the most difficult to handle and they have the most influence upon the character of the milk. Case No. 1 illustrates the influence of a nervous mother and one anxious because she thought she could not nurse her baby. I tried special diet, massage, gymnastic exercises, shortening the nursing intervals, but none of these brought the milk into the condition where the infant was thriving. There were reasons why I thought it best to keep her in the house. I assured her that as soon as she got out door exercise that her milk would be perfect. I told her that she could nurse her baby. By constantly making these suggestions I gained her confidence and sure enough her milk improved and the fat increased as soon as she began to take out door exercise. Her baby is now a fine, big girl, and it was nursed.

Food and Drink.—Probably the best stimulant for the whole lacteal secretion is proteid food. The nitrogenous foods seem to stimulate more particularly the production of fats. According to Hall proteids furnish the material necessary (a) for the rebuilding of cell protoplasm: (b) for the direct proteid katabolism; (c) for the deposit of reserve fats. Probably the reason that the proteids stimulate the production of fats in the milk is because the epithelium of the lacteal glands are specialized as to fat production. Decrease in proteid intake reduces the fat. Case No. 3 illustrates the increase of fats, the proteids remaining about the same upon a diet rich in proteids. Cases No. 4 and 5 illustrate the reduction of fats in the milk by cutting out the proteids from the diet. Both of these were

Analyses of mothers milk referred to in the text:

	Case No. I.		Case No. II.				
Date	7-22-10	8-1-10	5-25-09	3-4-09	6-15-09	8-25-09	11-22-09
Age of Baby	15 days	25 days	22 days	32 days	43 days	114 days	203 days
Reaction	Alkaline	Alkaline	Alkaline	Alkaline	Alkaline	Alkaline	Alkaline
Sp. Gr.	1028	1030	1032	1033	1029	1029	1032
Fats	1.	3.	1.	2.	1.50	4.50	5.
Proteids	1.57	3.55	3.75	4.15	3.07	3.55	4.4
Sugar	4.35	4.35	4.35	4.35	4.35	4.35	4.35
Salts	.20	.20	.20	.20	.20	.20	.20
Total solids	7.12	11.10	9.30	10.70	9.12	12.60	13.95

	Case No. III.		Case No. IV.		Case No. V.	
Date	6-15-10	7-22-10	11-29-07	12-16-07	10-15-06	10-29-06
Age of Baby	29 days	66 days	30 days	47 days	122 days	136 days
Reaction	Alkaline	Alkaline	Alkaline	Alkaline	Alkaline	Alkaline
Sp. Gr.	1034	1032	1036	1035	1032	1030
Fats	2.2	5.	3.6	1.6	4.	2.90
Proteids	4.46	4.35	5.20	4.6	4.25	3.56
Sugars	4.35	4.35	4.35	4.35	4.35	4.35
Salts	.20	.20	.20	.20	.20	.20
Total Solids	11.21	13.90	13.35	10.75	12.80	11.01

cases of fatty diarrhœa, which improved when the fats were reduced. Increase in fluids increases the milk; decrease in fluids increases the specific gravity.

The Infants Suction.—That or some other similar irritant seems necessary to the production of a uniform and regular flow of milk. It does not alter the character of the milk except when the nursings are irregular, too often or too great an interval intervenes.

Drugs.—The only drug that I have ever found to act as a gallactogogue, except those drugs that in a general way improve the whole body like tonics, has been Muriate of Pilocarpine. I give in water 1-8 to 1-2 grain at night when I have tried other means to increase the flow of milk without success.

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26 N. Laurel St.

A PLEA FOR A MORE CONSERVATIVE SURGERY OF THE OVARY.

By George H. Bunch, M. D., Columbia, S. C.

The ovary is the essential sexual gland in the female. It is about the eighth week before the testacle is distinguishable from the foetal ovary. They both develop in close connection with the mesonephros. In the male the duct of Muller atrophies and the testacle is developed from the duct of Wolf. In the female on the contrary the duct of Wolf atrophies and the ovary is formed from the duct of Muller. The ovary in the female and the testacle in the male are in every way homologous organs. The ovary is a ductless gland, whose most important function, as its name indicates, is the secretion of eggs. It has a gland structrue consisting of parenchyma and stroma with gland spaces which, having no ducts, excrete their contents into the free peritoneal cavity. The discharged ovum is caught by the fimbria of the Fallopian tube and passes through the tube, where it becomes fertilized, before it reaches the uterus. But ovulation is not the only function of the ovary. Physiologists are agreed that the ovary in common with the thyroid, the adrenolin glands, and the pituitory body has an internal secretion which is essential to the normal development and the maintainance of the proper nervous equilibrium in women. This is proved by the striking effects that result to the entire organism

Read before South Carolina Medical Association, April 1911.

after double ovariotomy. This effect is so evident that it is commonly known as the change of life. Ovulation begins with puberty and ends with the menopause. When the internal secretion begins and ends we do not know. After forty-five years of age the ovary atrophies and it is believed becomes a functionless organ. If both ovaries are removed in a young woman, it causes an artificial menopause with all the symptoms of the natural menopause, often in an aggravated form. Ovulation and menstruation are so related that they both stop at once. The uterus atrophies. The maummae atrophy. The external genitals atrophy. The woman often becomes fat and her figure loses the plumpness and the symmetry it has had. With these physical changes are associated nervous disorders that vary from paresthesia to dementia.

Thus we see that the ovary is one of the most essential organs in the female economy. Procreation and the perpetuation of the species is absolutely dependent upon it. The well-being of the individual is relatively dependent upon it. Although so important, comparatively few students of medicine recognize the macroscopical changes that a normal ovary undergoes in the performance of its function. A corpus luteum, which is but the normal condition following every ruptured Graafi an follicle, may become one-third the size of the entire gland. How easy it is to mistake such a condition for a cyst and a perfect organ be thus sacrificed to ignorance! Every rupture of a Graabian follicle leaves a scar. Therefo re every ovary as the years after puberty go by becomes scarred and disfigured. Such organs are in no sense pathological, yet we have all seen them removed under the false diagnosis of cirrhotic ovary. The average operator knows too little of the gross appearance and feel of a normal ova y in the various phases of its physiological life. Every medical school should give instruction in gross anatomy and pathology as well as in miscroscopical study.

The profession has so long associated pelvic pain indiscriminately with the ovary that even the laity has become obsessed with the idea. Nine women out of ten with distress below the umbilicus will tell the doctor that the ovaries are affected. No matter if the symptoms are due to constipation, pyosalpinx, retroversion, or general ill health, the ovary gets the blame. Nothing could be further from the truth and the profession is responsible for the wrong impression. The nerve supply of the ovary is largely from the sympathetic system and an inflammation of the ovary is usually secondary to an inflammation of the tube and is relatively painless. Most of the pain in a pelvic inflammatory condition comes from a retention of the pus in the tubes after the ends have become sealed by the inflammatory process. And I believe that sterility from gonno: rhoea is usually due to rather than to any fault of the ovary. Pelvic Injection travels from the pterus through the tubes. There is always a localized peritonitis around the fimbinateinft. .a of the tube and it is from this that the ovary becomes involved. When the primary focus of infection, viz: the tubes and the uterus, is removed, organs secondarily infected often overcome this infection and regain their functional activity. Now, this is peculiarly true of the ovary. It has an abundant blood supply, the ovarian artery coming directly from the abdominal Aorta. Conservatism must be consistent, and it would be folly to burden the patient with any gland whose forenchyma is so destroyed by disease that it can no longer perform its function. Such an inflammatory mass would be a serious menace if left behind. Usually the destruction of the ovarian tissue is not so extensive but that some part of one ovary remains uninvolved. Under such condtions the organ should be resected and as much of it as is capable of fuctionating should be retained. Only a narrow fringe of ovary will prevent a woman from being unsexed. And if one tube with the uterus can be retained, there is a fair probability of conception although the ovary left be on the opposite side to the tube. When the uterus or tubes are removed the woman is sterile, but when both ovaries are gone she is unsexed and no longer a woman.

The ovary is a movable organ and its function is only relative. When the uterus enlarges during pregnancy, the broad ligament with the ovary is carried up into the abdomen by the fundus. This is nature's way of protecting such an important organ from the increased pelvic pressure, due to the constantly increasing uterus. It is because of this quality that the ovary remains unchanged by a pibroid uterus; and in hystorectomy for pibroid the ovaries should not be removed, especially if the patient has not reached the menopause. In carcinoma, of course, everything should be sacrificed in our endeavor to save life. Every cancer cell, every enlarged gland must be removed, no matter how radical the operation may be. Just as the ovaries are carried up with the uterus when that organ enlarges, they are pulled back by it in retroversion and down by it in prosidentia. Being attached to the broad ligament, any thing producing a relaxation of that ligament will effect the position of the ovaries by allowing them to fall back into the pelvis. Prolapse of the ovary is in this way associated practically always with a retroversion of the uterus due to a lack of support by a relaxed pelvic outlet or by a stretching of the uterine ligaments. The pain from which the patient suffers is promptly relieved by a repair of the lacerated perineum and a Gilliam suspension of the uterus. There has been a long standing difference of opinion among gynecologists as to what should be done with ovaries containing small multiple cysts. It was once the custom to remove such

organs, although the condition rarely gives symptoms. It is now conceded that this procedure is too radical. Many authorities do not disturb such ovaries at all, believing that the condition does not get worse. Such an ovary causes no pain and continues to functionate.

There is no surgical problem in which better judgment is required than whether to oblate, resect, o. leave alone the ovaries in any given case. Ovariotomy is a very simple proceedure with practically no mortality. It is easier to remove than to resect an ovary. The operator should not be an extremist. He should not remove such a useful organ unless the necessity be evident nor should he leave in the pelvis a mass of pathological debris, just because the woman for sentimental reasons does not want her ovaries removed. The removal of such a mass does not unsex the woman. This has already been done months before by disease. When we speak of conservatism in surgery, we mean a conservatism that is consistent with good health. Our endeavor should always be to cure the patient. In patients forty years of age there is not the same need for conservatism of the adnexa as in younger women. Statistics of different operators vary. Some claim that symptoms are not relieved by conservatism, that nothing but oblatoin cures. Such a position is radical and untenable. Not more than 5 per cent of patients who have had a conservative operation properly done should return for a second operation. There are neurasthemics whom nothing cures. When such patients once have a ret oversion of a gonorrhoeal infection, they are never relieved. They acquire the operating habit. One exploratory laporatomy after another is done, until finally the operator in sheer desperation does a pan by storectomy, and usually makes his patient much worse than she was even with the primary condition.

It has been aptly said that a woman's ovaries belong to the commonwealth and that she is only their custodian. It is the ovary that makes a woman a woman. It is the essential sexual organ in the female and from it all the peculiar qualities of the sex emanate. Be it said to our shame that through ignorance thousands of useful ovaries have been removed. We have deprived not only individuals but the nation of that which we cannot restore. The ovary is the homologous organ to the testacle. Although the testacle, through its exposed position and the immorality of the male sex, is much subject to disease and truama than the ovary. We venture to assert, without fear of successful contradiction, that there are a hundred women to one man castrated. From sentiment, from surgical analogy, and from fairness, we respectfully ask for the ovary the same sane surgical consideration as for the testacle.

The Woman Physician.

By Dr. Sophia Brunson, St. Matthews, S. C.

When we consider the course and conduct of man, present and past, we see that he is largely guided by custom. Sons follow without question in the footsteps of their sires. The usages of the passing generation are adopted by the coming one, not because of their adaptability to present conditions, but because of their prevalence. Man reluctantly consents to change the customs of his ancestors. Prescriptive institutions, religious, social and political, acquire a peculiar sacredness in the eyes of man which forbids investigation, and repels the rude touch of the unsympathetic. Custom is the idol of society, and he who essays to change it is regarded as an iconoclast, a dangerous innovator worthy of the curse of the gods.

This unwise conservatism in man often leads to the retention for ages of customs that are positively harmful, and that impede the progress of the race. Witness, for example, in India the burning of widows upon the funeral pyres of their husbands, a practice which, despite its revolting cruelty, obtained for centuries, and which was reluctantly abandoned only in compliance with the peremptory command of the British government. Witness in China the binding of the feet of young girls, a performance which not only causes indescribable agony to the child, while a child, but which seriously impairs her efficiency as a woman. Witness in America the restricting of the waists of women, a fashion which destroys the natural symmetry and beauty of their figures, displaces the vital organs of their bodies, and unfits thousands for the sacred responsibilities of wifehood and maternity. Witness also the professional and political disabilities that have been imposed upon woman since the beginning of the human race, thereby depriving her of privileges that are justly her own and restricting her actions to a certain prescribed sphere. No good reason can be assigned for such prevailing practices as these. They are all in violation of natural laws, and are foolish, injurious and unjust. Yet in the face of the folly, injury and injustice they continue simply because they are custom. Our fathers did this and so do we.

Now progress demands the careful scrutiny of all inherited customs, and if necessary the judicious elimination of all those that are arbitrary. For permanent racial improvement is attained not by unquestioning compliance with arbitrary requirements

*Read before the South Carolina Medical Association, April 1911,

but by intelligent obedience to laws that are in harmony with the nature and constitution of man. Whatever custom is contrary to nature, however old and venerable it may be, is an impediment to progress, because it restricts normal development.

Having said this much by way of introduction we now approach the subject under consideration, viz: Woman's Place in Medicine. Woman has entered the medical profession, and entered it to stay, though an inveterate conservatism, obstinate and unreasonable, has opposed her at every step. And this conservatism is not dead yet. True, it is in the throes of death, but it is dying hard. Wherever it can it flings its decrepit form athwart the highway of progress, and with a voice reminiscent of the plenary power which it once possessed, it says to the advancing hosts of women, "Stay. You are forbidden to enter here. This profession from time immemorial has been reserved for men, and we cannot at this late day depart from the ways of our fathers. Stay. Stay. We cannot admit you."

The experience of Madam Curie, the "heroine of radium," aptly illustrates the unreasonableness of the conservatism of which we have just been speaking. The Academy of Sciences refused to admit her to membership. Madam Curie happened to be born a woman, therefore conservatism ays that she must not be admitted to membership in the Academy, however great her learning or valuable the services that she has rendered science. The question is one of sex, and not of scientific attainment.

But as we have just said, woman will not be baffled by any such exhibitions of fogyism. She has heard the call of humanity and she has risen to respond. She reasons correctly that her sex is not an adequate barrier to the enjoyment of privileges and opportunities to which she is entitled by natural equipment. The ancient custom that excludes her from the professions and restricts her wholly to the domestic sphere, simply because she is a woman, is unreasonable and therefore unjust. It is one of those arbitrary restrictions imposed by the will of man which hinders rather than helps the progress of the race, and the sooner it is abandoned the better. Woman is entitled to all the rights and privileges which man enjoys. Her field of action should be commensurate with her gifts. Endowment, not sex, indicates sphere. When her talents are great, and her ambition and taste, but more often the necessity of earning a livelihood for herself and others dependent upon her, lead her away from the quiet seclusion of home into the public arena, why should the fact that she is a woman restrict her? Why should it be considered indelicate for her to study the human body, that most wonderful and intricate piece of mechanism, and discover the function of each organ and the part it plays in the maintenance of health and efficiency? If she has the capacity and inclination for such vocations, that have been considered purely masculine, why should her sex prove to be a barrier?

Now in reasoning thus we do not mean to imply that woman should forsake the domestic sphere for which she is pre eminently fitted and over which she has long presided. Not at all. The sacred duties and responsibilities of wifehood and maternity cannot be neglected by woman without irreparable loss to mankind. The home is the cradle of the Nation. Its influence is formative and directive. As are the homes so is the community. As are the communities so is the State. As are the States so is the nation. Home influence is all pervading. It develops character; character creates sentiment; sentiment moulds public opinion; public opinion shapes the policy of the nation. Thus society in the broadest and most comprehensive sense of the term, is but a reflex of the home; and woman is the home-maker.

For this delicate task which we all recognize to be of prime importance, woman is peculiarly fitted by nature. A true womanly woman who, with unselfish soul and lofty purpose, so controls and directs the affairs of a home as to create an atmosphere of wise contentment and peace, and so moulds the plastic souls of nascent youths as to guide their expanding minds into channels of pure and worthy thought, is doing a work that is second to none in the world. And from this noble work which is fundamental to all others, nobody in his right mind would for a moment attempt to dissuade woman. In this she occupies a sphere that is peculiarly her own, a sphere which no other can fill. Here she has wrought her greatest work and has proved herself to be a tremendously potent factor in the development of the human race.

But when all this has been said, still we plead for the right of woman to enter the professions if she chooses. As a matter of fact most women prefer the quietude of home, and it is well that they do. But there are many who do not, and again others who are compelled to support themselves. They are not suited by nature for housekeepers, teachers nor dressmakers. Their talents and tastes lead them to desire different fields of activity. Some prefer law, some dentistry, some medicine, and

so on. They are endowed by nature with capacity that promises success. Then when a woman finds herself thus endowed, should she be denied the privilege of following the bent of her mind simply because she is a woman? She had no voice in the creating and equipping of herself. She did not bestow upon herself the mental qualities which lead her to seek a sphere of action in the more public walks of life. That was the work of her Creator, and it indicates his purpose in equipping her. We repeat that endowment points to sphere, and when the creator gives to a particular woman a particular endowment which fits her for successful work in a particular profession, and her taste and ambition incline her to choose that profession, why should her sex stand in her way? It seems to us that under such conditions, a sense of fairness and justice unequivocally decrees that she should be allowed the same freedom of choice that is granted man. Sex should not be considered.

And now we come to speak more particularly in regard to the medical prosession. Here is a sphere for which woman is peculiarly adapted and in which she is capable of rendering most efficient service. The woman physician is needed. There is a distinct work for her to do, and there ought to be one or more in every community. In speaking thus we are not disparaging the work of the male physician, nor implying that he should be supplanted by the female. But when we consider the large number of women and girls who need medical attention and who are restrained by modesty from submitting to examinations by male physicians, and the great amount of suffering and the large number of premature deaths that are indirectly caused thereby, we do asseverate that the place of the competent female physician cannot be successfully filled by one of the opposite sex. Every woman physician of large experience could, if necessary, tell of scores of cases of delayed recovery, of prolonged suffering, of premature senility, all because the patient was a timid, shrinking woman and her physician a man. It is needless to say that such modesty on the part of woman is foolish, and that when health and efficiency is involved it ought to be laid aside. Foolish or wise, it exists.

But not only is the woman physician needed in general practice and in hospitals, but there ought to be one in every college for women, This is a crying necessity that has been too long neglected, If the patrons of our female colleges were alive to the needs and best interest of their daughters, they would peremptorily demand women physicians in these schools. Many girls leave college after a comparatively brief stay, nervous wrecks, and some are injured for life because they lacked the proper attention at the proper moment. The girl student leaves home for college at a critical period of life. She is just entering the age of puberty, and is beginning to become conscious of herself as a woman in contradistinction to man. The innocency and simplicity of childhood are passed and the intricate problems of womanhood are beginning to appear. Her cerebral system is rapidly devaloping and her nerves are in a state of unstable equilibrium. A false step at this stage might prove permanently disastrous to her body, her mind or her character, or to all three. A mother's counsels are needed then if ever. And yet she is taken from home at that critical period and placed in a boarding school under the medical supervision of the college physician, a man and a stranger at that. Through some youthful indiscretion of one kind or another she perhaps is made sick, not serious at first. She neglects herself as the young will do, till finally some complication that is peculiar to females arises. There is no one to whom she can unburden herselt, and often she gives up in discouragement and goes home to linger for months and years in a state of semi-invalidism. If there had been connected with the college a female physician to whom she could have gone and spoken freely, the error would have been corrected in its incipiency, and years of suffering avoided. Every school in which girls are taught should have a chair of physiology and practical hygiene occupied by a woman physician. And the girls ought to be taught to care for themselves properly, and instructed in regard to the physiological functions of the vital organs of the body. Instruction in dress, diet, exercise, breathing, sleeping, eating—all should be included in the college curriculum. Moreover since every normal girl is a prospective wife and mother, she ought to be taught in regard to the care of children. Such instruction is practical, and if received by the majority of our women would result in the permanent uplift of the race.

So we repeat in conclusion that the woman doctor has come to stay. She is needed and will be as long as there are ailing women and suffering girls. She seems to be especially fitted by nature for the work to which she devotes herself. She possesses tenderness and tact, kindness and considerateness, sympathy and suavity, and when in the sick room, the gentleness of her manners, the softness of her voice, anb the delicateness of her touch, all tend to soothe the sufferer and to allay the irri-

tation of his nerves. She easily wins the confidence of her patients and binds them to herself by strong and enduring ties of affection, In a word her presence is a boon to the women of any community because she meets a long felt want.

And yet there are old fogies who are raising the cry that it is indelicate for women to study medicine. That she is out of her place. Why ts it that we never hear anything about the work of the trained nurse being indelicate and unwomanly? It is because the trained nurse works under the directions of the male physician and is subservient to him, therefore her work is considered perfectly proper, no matter how menial it may be, nor how much the persons of her male patients are exposed in her presence. Still it is considered very improper by some people for the two sexes to study side by side in the same medical college. "To the pure all things are pure." How can there be anything immodest for men and women of mature minds to study together the great truths that pertain to the human body, especially when the object in view is such a lofty one, viz: to uplift mankind, to heal their diseases, and to teach them how to live? Common sense and true modesty can see nothing improper in such association of the two sexes. Only the false and prurient thing that we call prudery, but more properly the jaundiced eye of prejudice, can detect anything indelicate in such intercourse.

The treatment accorded Elizabeth Blackwell, that great pioneer woman physician, who established in 1853 "The New York Infirmary for Women and Children," and which proved so successful that in 1868 she founded the "Woman's Medical College," which was afterwards converted into Cornell University, is an illustration. When this noble hearted woman who did so much for humanity went abroad that she might increase her knowledge and augment her usefulness by studying in the colleges of Europe, she was told in Paris that it would be impossible for her to gain entrance to the schools or hospitals there unless she adopted male attire. That was long ago, and yet the College of Charleston is shutting its doors to women, not because they lack the brain or capacity to study medicine, but apparently only because they are women. Is it right that our girls who wish to be educated in the professions, or along advanced lines the better to serve humanity, should be compelled to go North to receive such training? No, a thousand times no! Where is our boasted Southern chivalry? Where is our sense of right and justice? Our girls are only asking the right to be trained and to develop their God-given talents in this their own loved, native Southland.

We cannot stem the tide of progress by our puerile prejudices and conventions; for the time is coming when our girls will not have to stand and knock upon closed doors and beg for opportunities for the training accorded to their brothers but denied to them. And enlightment and right at last will triumph, and prejudice and injustice will hide their heads in shame, and die as they deserve, even as do the germs of disease in the poisons which they manufacture.

Myoma with Pregnancy.

By H. R. Black, M. D., Spartanburg, S. C.

Mr. President:

The most common neoplasm that develops in the uterus have been designated myoma, fibroma, fibromata or fibroid. They are made up of a disorderly interlacement of muscular and connective tissue fibers and grow from any portion of the uterine body, usually above the cervix. They vary in size and shape from a pin head to a mass filling the entire abdominal cavity. Usually they do not give evidence of their presence until sexual activity has been established for some years, most frequently about middle life, although they are said to exist in fetal life in diminutive form. The first clinical signs to be noticed are painful menstration, excessive at the menstral epoch usually, and sterrility in married women, or repeated early miscarriages. As a rule they are not noticable by their size until they have grown beyond the capacity of the pelvis, when they become evident from enlargement of the lower abdomen, a direct examination is necessary in many cases to make a correct diagnosis. The rate of growth depends on the blood supply. In the more vascular, myoma develops rapidly while those less vascular develops more slowly. The most striking symptom in the beginning is a profuse menstral flow. It occurs in about fifty per cent of all cases. As the tumor grows the hemorrhage may become alarming and the most profound anemia is not uncommon from the loss of blood. Pain is ofted a conspicuous symptom. There are three varieties of fibroid tumors of the uterus: viz: Submucous, interstitial and subperitoneal, according to their location. Myomatous tumors are liable to various complications, but my time is too limited to discuss them in this paper. None are more important, however, than a large myomatous mass

*Read before South Carolina Medical Association April 20, 1911.

which has become incarcerated in the pelvis, complicated with pregnancy. Such is the case that I wish to report.

On Feb. 15th last, I was called to see Mrs. H. T. B. in consultation with Dr H. T. Morrow, of Campobello, S. C. On my arrival, I found him greatly worried about the condition of his patient. Without loss of time, he said that his patient was in labor and that she had a large mass in the pelvis. After obtaining a brief history of the case, we went directly to the patient's room and I immediately began my examination. She looked haggard and worn, with an expression of pain—with one hand upon the abdomen, I could distinctly feel a wave of uterine contraction. In less than five minutes, another pain—and another, and they continued to come. After the proper toilet was made, I proceeded with the vaginal examination. A large solid, immovable mass could be easily felt in the pelvis. There was barely room in the vagina to admit the examining finger. The cervix was found high up, on a level with the brim of the pelvis, pointing anteriorally and was difficult to reach. It was dilated scarcely enough to admit the tip of the finger and was very rigid. After the withdrawal of the finger, the tip was tinged with blood. A myoma with pregnancy was evident. There were only two things to do; open and do a myomectomy, if possible, if not, a Porro, There was nothing special in the family history, the other members all being in good health. The patient's health had been excellent during her married life. Had been married about eight months—pregnant six months. Soon after conception, she began to complain, and her distress increased as pregnancy advanced. Myoma of the uterus always grows rapidly after conception, owing to the increased blood supply. Pregnancy, however, is not very common, but should it occur early, miscarriage is the rule Just how much the presence of this neoplasm had to do with the excitement of uterine contraction, I am unable to say. She gave no history of uterine pain until four days prior to my visit, although she had complained of much annoyance and a vague, uneasy feeling in her abdomen almost from the beginning of her pregnancy. She assigned overwork as the cause of these contractions. The day after the pains began, she rode six miles in a buggy with her husband, and spent the day with her mother, returning to her home in the afternoon. On the following day, the family physician was consulted. He gave morphine, and ordered it repeated as often as was necessary to control the pain, with instructions that the patient remain quiet in bed. In spite of his efforts, she grew worse and I was summoned on the fourth day of her illness. Having completed my examination, and having obtained, as far as possible, a complete history of her case, we repaired to the yard where we held a brief consultation. Without discussion, we agreed upon the diagnosis, and that an early operation was imperative. Her husband was called into the consultation and apprised of his wife's condition. He was very much "shocked", but soon recovered, and left the case to our management. We then returned to the patient's room and informed her that an operation would be required to save her life, and that it would be necessary for her to go to a hospital. She broke down and began to cry, but soon "pulled herself together" and consented. Immediately she was given a quarter of a grain of morphine, hypodermatically. and things were hurriedly arranged, as we were twenty-six miles from Spartansburg, and six miles from a railroad station, without modern conveyance and with only two hours to catch the train. She was placed in a buggy with her husband. We had driven less than a mile when she was seized with a violent pain. We stopped and I looked her over. I knew that she could not deliver, nor did I believe there was any danger of hemorrhage, but I was fearful of shock, although her pulse was good and strong. I trusted to the morphine, and instructed her husband to drive on, or we would miss the train. The pain must have lasted six or eight minutes—it seemed an hour. After this, we got along fairly well by repeating the morphine and arrived at the station about twenty minutes before train time. The patient was lifted from the buggy and walked to the waiting room —a distance of about thirty feet—where she sat suffering severe pains. When the train arrived, she again walked about the same distance, and was lifted into it, where she was laid on a seat. In another hour's time, we were in the Spartanburg Hospital, which was a great relief to me. The patient was immediately put to bed and was made as comfortable as possible during the night. On the following morning, the colon was irrigated, and at eleven o'clock she was placed on the operating table, and the abdomen was laid open from the umbilicus to the symphasis. The uterus with its contents was then turned out of the abdominal cavity, pulling the tumor with it. As it emerged from the pelvis, a loud, sucking sound was heard over the room. The tumor had no pedicle nor adhesions. It was attached to the lower segment of the uterus, posteriorally, and was incarcerated in the pelvis. It

was as large as a baby's head seven months old. Its base or attachment was at least four inches. It could not be removed without breaking through the uterine wall, which was comparatively thin. Therefore, I did a Porro, with the assistance of Drs. Geo. W. Heinitsh and J. E. Edwards. The technique was briefly as follows:

After locating the left uterine artery, a No. 2 Chinese silk ligature was carried through the broad ligament on a transfixion needle, close to the cervix, including the artery, being careful, however, not to include the ureter, and the whole was tied in mass. A clamp was then placed on the uterine side, and the ligament was cut between—close to the clamp. The right side was treated in like manner. The uterus was then drawn backward and the anterior loose peritoneal fold was cut through from one round ligament to the other and pushed down, baring the cervical end of the uterus almost down to the vaginal junction. The uterus was then divided in its cervical portion. After securing one or two bleeding points, the cervical canal was closed over with cat gut sutures, and the loose flap of peritoneum in front was stitched over the stump to the peritoneum behind. The abdominal incision was then closed by layers with cat gut sutures, which were reinforced with three deep silk worm gut sutures. The whole operation consumed forty-five minutes. The patient was put to bed without much shock, and made a splendid recovery, leaving the hospital in less than four weeks. In a letter from her, dated one month later, she reports herself as doing well. This is the fourth Porro that I have done without a death.

Briefly, I will report another case which was referred to me by Dr. W. P. Coan, R. F. D. 5, Spartanburg, S. C., in 1909. This patient was a negress, age twenty-nine years. She gave the history of a myomatous uterus of nine years duration, with a probable pregnancy of four and one-half months. Prior to conception, the tumor had given her little or no trouble. During the month of April, however, she began to have pains in her lower abdomen with great distress. As the pregnancy advanced, the pains increased until she was compelled to seek relief. When she entered the hospital in July, she complained of shortness of breath. On the 25th, with the assistance of Drs. Geo. W. Heinitsh, Coan and W. G. Sexton, I removed the entire uterusa and its contents, using the same technique as above described. The uterus was a large fibrous mass, with large veins running over it, that looked like umbilical cords. It was so vascular that every step in the operation had to be made with the utmost care. To each cornu, there was attached by pedicle, a tumor exactly the shape of a kidney, but they were much larger. This patient made a good recovery also.

Myoma, complicated with pregnancy, is of great practical importance and the surgeon is often called upon to decide if pregnancy does exist in a given case. If so, is the mother's life in danger, and is an operation imperative; or whether the uterus can be equal to the burden and carry a living child to full term without surgical interference.

As I have already said, as a rule, women with a large uterine myomata do not become pregnant. If so, early miscarriage is to be expected, although there are numerous cases on record which have gone to full term, and have given birth to living children. The matter of surgical interference must depend upon the size and location of the tumors. If they are attached to the cervical portion or lower segment of the uterus, and interfere with the passage of the child's head, and cannot be pushed out of the way so the head can pass, an operation is then imperative. If, however, the growth is above the brim of the pelvis, our considerations must be conservative, and the child should have the benefit of the doubt.

Stone in the Ureter.

By Dr. R. C. Bryan, Richmond, Va.

Stone in the ureter is not an uncommon condition. Charles L. Leonard states that 50 per cent of all urological stones are found here. This means that they equal in frequency kidney and bladder calculi together. This is not at variance with anatomical facts, for stones manufactured in the kidney above attempt at some time in their life's history to gain the outer world, and if small, traverse the ureter hoping to reach the bladder, if by virtue of increase in size during its trip it becomes arrested, or by reason of peritoneal exudates, with consequent fibrotic replacements, old appendicular troubles, ovarian or tubal inflamation and overgrowths, uterine fibrosis, multiple pregnancies, etc., the lumen of the ureter has been restricted or embarrassed, this stone, forwarded from above, is unable to go through the ureter, and becomes caught somewhere along this tube, it acts as a ball valve and with a limited excur-

*Read before the Northern Neck Medical Association at its bi-annual meeting at Kinsale, Va., May 11th, 1911.

sion plays up and down or becomes tightly wedged giving rise to ureteral incarceration.

Again, stones may develop primarily in the ureter. Kelly reports an instance of a stone developing about a silk ligature. It is easy to understand how crystal-laden urine could place its deposit on this foreign body. Foreign bodies in the ureter, however, are a rare cause for stone formation.

More frequently stone formed in the ureter is due to some damage or injury to this tube arising in the peritoneal cavity and exercising its pressure upon the ureter, causes an extra-peritoneal, circumscribed inflammation, which ultimately contracting down into scar tissue, restricts and constricts the ureter giving rise to stricture, or to traction-diverticulum. It is easy to see how stones may be found back of this barrier or in these false pockets.

It is well known that strictures of all mucous tubes show one thing in common, whether due to intrinsic or extrinsic causes, and whether benign or malignant, proximal to the stricture there is always a dilatation of the tube, which is in a measure dependent upon the narrowness of the stricture, its density and duration. In old long standing dense, firm, unyielding, benign strictures there is an immense ballooning of the tube proximally. It is here that the stone plays up and down, at irregular intervals, to be caught at the stenosed mouth, and give rise to severe pain, "kidney colic". More frequently, however, it lies dormant, slowly increases in size, and is a constant source of discomfort and pain to the unhappy possessor.

Ureteral stone is usually single, occasionally multiple, exceptionally bilateral. Multiple stones occur, according to Tenny, once in eight times in ureteral calculus. Males are more frequently the victims than females, according to Morris in the proportion of two to one. The right side seems to be involved more frequently than the left, this obtaining particularly in women. This fact may possibly be explained by the preternatural mobilily of the right kidney, the tendency on this side to have this organ floating, which in turn would mean angulation of the renal vessels, stagnation of blood, minute hemorrhages and precipitation of crystals.

The ureter is normally 12 to 13 inches long and 5 m.m. in diameter, but there are three points of physiological constriction. 1. Where the pelvis of the kidney becomes the ureter averaging 1-12 of an inch in diameter. 2. The point where the ureter crosses the iliac artery 1-7 of an inch. 3. The opening of the ureter in the vesical wall, averaging 1-10 of an inch. If the stone gets through the first barrier it is more than apt, by virtue of the muscular potentiality of the ureter, the urine dammed back of it, the vertical position, and forces of gravity, to gain the bladder and so be voided. If it becomes arrested, that train of symptoms are initiated which subjectively and objectively give us a strong clue to the cause of trouble from which the patient suffers. Subjectively the symptoms may be classified according to their respective importance and significance as: 1. Pain. 2. Frequency of urination. 3. Haematuria or anuria.

Pain.—Since we recall that the ureter is a highly developed muscular tube, is constantly undergoing its physiological activity, and further that it is resplendent in nervous reward, any sharp angulated body scratching and irritating the delicate mucosa, gives rise to a pain most severe and agonizing which once experienced is not easily forgotten, This pain may be referred to the glanspenis, to the bladder, to the kidney or even to the knee and thigh, dependent upon the point of arrest of the stone and which plexus of nerves its presence happens to be irritating. These paroxysmal outbursts may occur at long intervals, or frequently, and are probably due to the stone changing its position or bed, or being grabbed in the open end of the ureter below. The writer has serious doubts if stone in the pelvis of a healthy kidney ever gives rise to pain, the pain arising only when the stone slips out of the pelvis and is caught in the upper end (the uretero-pelvic portion) of the ureter. As an instance of this your attention is called to Figure 8 Case IX

R. E. C. age 25, single, clerk (patient Dr. S. N. Michaux, by whom courtesy of history is given). In September 1908, had some discomfort in the right side. From then to September 1909, has never had any seizure or even pain, but was constantly conscious that he "was not right under the ribs". The urine scalded and burned some, palpation over the kidney was painful. X-ray positive, nephrotomy gave stone, an accurate cast of the pelvis and ureteral outlet.

In this instance the patient never complained of any pain, simply of discomfort. Had there been infection, a genuine pyelitis, there would have been pain, dependent upon the degree of inflammation.

Again, the intensity of the pain in ureteral stone may be due in a measure to its composition, for the oxalate of lime is the sharpest and hardest, and the uric acid the softest. The smaller stones too, change

their position more frequently than do the larger stones, which lie with their long axis in the axis of the ureter.

2. Frequency of Urination—This is a most significant and weighty factor in the diagnosis, and obtained in about 70 per cent. of the writer's cases, and may be explained in two ways. First, that all these patients drink an inordinate amount of water, since they have found out by experience that it helps the condition and makes the attacks of pain less severe, and second, since stones in this series of cases were caught in the lower part of the ureter. they stimulated that group of nerves controlling the bladder. There was in consequence a constant vesical tenesmus with the desire for urination. This was relieved permanently by the passage, or removal of the stone. We learned later on in our series of cases to attach great importance to this pollakiuria, and patients coming to us complaining of an annoying frequency immediately put us on our guard.

3. Haematuria and Anuria.—Necessarily these two symptoms would not appear as frequently as would the preceding (pain and frequency) for the haematuria is directly due to the irritating sharp stone so scratching and damaging the mucous wall as to give rise to hemorrhage. This blood would be mixed in with the urine, darken it and only in rare instances of a large loss would the patient's attention be called to it.

Anuria was present in two of our cases. This is caused by an uretero-renal or reno-renal paresis or "kidney block." It is but another expression of the stone becoming wedged, with profound vaso-motor disturbances. In one instance the patient had been under observatton on account of these outbursts for supposed Bright's disease. There has been no suppression since the removal of the stone.

Objectively we possess much more definite measures for the diagnosis of stone, as the patient's history particularly in this class of cases, is notoriously unreliable.

By 1. Urinalysis, 2. Cystoscopy, 3. Ureteral Catheterization and 4. X-ray, the presence, number, size and location of the stone can be pretty keenly and finally determined.

I. Urinalysis:

The character of the urine will be in a large measure dependent upon the degree of obstruction whether complete, incomplete, unilateral or bilateral.

The constant presence of pus is most significant. This is due to pressure necrosis, the stone at first giving rise to blood and later pus cells. When this inflamed area heals over the pus disappears. The examination of the urine may show these constituents today and nothing tomorrow. The importance of frequent examinations carefully carried out then, is most significant. The character of the epithelium, too, is of diagnostic value. Its shape and size would lead us to a clue of the location of the stone. Although the epithelium of the urinary system is very hard to differentiate, it is all of the same caudate variety, small above in the tubules and large below in the ureter and bladder, numerous examinations may give us a constancy of type that would be very suggestive. For its shedding off is due to inflammation and this in turn likely caused by the irritation of the stone.

The appearance of crystals are not of so great importance. All urine bearing crystals does not speak for stone. Their persistency, however, along with the constant presence of microscopic blood, pus cells and epithelia in their varying constancy, one being prominent at one time, and one at another, but all being found on repeated examinations, would at least in the absence of other clinical signs, give a clue to the possible cause of the patient's distress.

It must not be forgotten that stone arises in a diseased kidney or ureter even more frequently than in a healthy one. But with casts, albumen and other evidences of a genuine nephritis present, the investigation for stone, but confine his treatment to the diseased kidney, for there are paroxysmal renal pains dependent upon inflammation here, just as inflammation means tension, and tension pain, in any other part of the body.

II. Cystoscopy:

Is a very valuable adjunct to the diagnosis of ureteral stone. And further, it positively informs us of the bladder and whether a stone is present there or not. In those instances in which the stone is caught in the lower part of the ureter, there is a decisive and well marked oedema, puffiness, swelling of the ureteral mouth which is all the more apparent by contrasting with its fellow of the opposite side, for here the pressure of the stone has choked off the smaller venous radicles and given rise to the congestion an "oedema bullosum"; For the normal ureteral mouth appears as a slightly red slit or crescent, abruptly shading off into the healthy, pale, vesical mucosa. Again, pus, blood, debris and shreds may be seen now and then emitting from the suspected side.

III. Ureteral Catheterization:

This is not a difficult operation although it may appear most formidable. By its

means the length, condition, stricture, patency, obstructions and stone may be pretty accurately and painlessly determined. It is now that the urine from the two sides may be segregated and put aside for examination, for ureteral catheterization is the only absolute and positive means of collecting the urine from each kidney. If the stone is struck while catheterizing, a resistance is noted and an ultra-acute sharp pain, "kidney colic" is brought out by dislodging it, which makes further investigation for the while impossible. The writer on two occasions has shoved a metallic bougie up the ureter and sounded the stone getting the unmistakable metallic click. This would appear to be in selected cases an infallible and absolute test.

Futhermore, the many tests now employed to ascertain the functionating capacity of the kidneys may be used and the separate urines analyzed to find out if these organs are sufficiently active to stand the strain of operation and a general anaesthetic. The writer has had no experience with wax-tipped bougies. It would not appear that they would be very much more reliable than the ordinary catheter.

IV. X-Ray:

This method is the most powerful in the diagnostic armentarium. When it does fail, it may be traced more to physical laws than to a negative value. Stone weight determines the shadow. The most distinct is oxalate of lime which is deeper than bone tissue. Phosphate of lime is next in depth, and uric acid crystals, which constitute a fair percentage of all cases, throw a very slight, or no shadow at all. It is in these instances that errors arise. According to Leonard, the Roentgen method includes less than 3 per cent. of discovered error.

The skilled interpreter will not confound the shadow obtained with appendoliths, enteroliths, calcified glands, pheboliths, calcareous deposits in the iliac artero, sesamoid bone in the tendon of the obturator internus, bony spurs, and foreign bodies, for a stereoscopic view will readily determine the depths of the shadow, and further, another skiagraph may be taken with the leaded catheter "in situ" or with the pelvis and ureter injected with some silver staining fluid. It may require several pictures to finally determine if stone is present, but that is what we are looking for, and trying to establish. It is what the patient came to us for. With repeated negative plates we can discard the provisional diagnosis, with positive plates, the size, location, number and characters of the stone or stones determine us how and where to operate. The one condition with which stone in the ureter can justifiably be confounded, is appendicitis.

The writer does not intend to recount and give the full histories of the ten cases which constitute his series, but only to recapitulate and call your attention again to some of the more significant clues, which would seem to bear upon diagnosis.

Stone in the ureter is essentially urological in its manifestations. It may require repeated urinalysis and frequent examinations to get on the trail, for, as we have already said, the patient apparently intentionally avoid giving us a distinct clue. It would appear, however, that these cases can be analyzed pretty accurately, provided the physician in charge would differentiate pelvic troubles in the female and gall stone colic and appendicitis in both sexes.

Case 1 was characterized by pain, dis-

	Ureteral Stone.	Appendicitis.
Age.	Constantly in 2d & 3d decade.	Any.
Sex.	More frequent in males.	More frequent in males.
Occupation.	Sedentary.	No influence.
Pain — Onset.	Ultra-acute, reaches climax 5 m.	Subacute, reaches climax 2-4h.
Pain — Location.	Urogenital, kidney, bladder.	Abdominal epigastric, focal.
Pain — Duration.	2-4 hours, rarely longer.	12-14 hrs., probably longer.
Temperature.	Normal, subnormal.	Normal, elevated.
Pulse.	Much accelerated, soon drops.	Moderately accel. more so.
Urinary disturbance.	Anuria, haematuria, Pollakiuria	None.
Vomiting.	Of shock.	Splanchnic disturbances.
Belly wall, right rectus	May be rigid on right.	Rigid.
Right thigh.	Flexed if on right.	Flexed.
Bowels, Stone in pelvic part.	Tenesmus, constipation.	Constipation.
Palpation over Ap'dx	Not painful.	Painful.
Urinalysis.	Blood, pus, crystals.	Nothing significant.
Blood count.	Normal.	Elevated.
Termination.	Gets rapidly better.	Grows slowly better or worse.

tinctly urogenital, two attacks of kidney colic.

Case 2 by haematuria.
Case 3 by pain and pollakiuria.
Case 4 by pain and haematuria.
Case 5 by pollakiuria.
Case 6 by pain and pollakiuria.
Case 7, 8 and 9 by pain.
Case 10 by haematuria and pollakiuria.

Treatment.—Is and must be surgical resolving itself into one of two methods: 1. Ureteral catheterization with lavage. 2. Operation.

In certain instances when the stone is small and lodged in the lower segment, catheterization and injection of oil into the ureter to lubricate its passage, may be the means of dislodging the stone. This obtained in three of the writers cases.

In those instances where the stone is much larger, impacted, or giving rise to marked haematuria and pain, radical operative intervention is immediately indicated. The usual loin, extra-peritoneal incision is the one of choice. By it the ureter may be stripped from the kidney above to the bladder below, the stone located, a free longitudinal incision made and removed. The edges are now brought together with fine catgut. There need be no fear of leakage. The ureter heals rapidly and kindly, in but one instance in our series continuing to drain for five days. In all the remaining instances closing at the end of two days.

The American Society of Tropical Medicine.

The arrangements for the eighth annual meeting of this society, which was held in New Orleans on May 18th and 19th were complete. The morning session on May 18th was held at the rooms of the New Orleans Parish Medical Society, 141 Elk Place. Luncheon was served at the Refectory on the Campus of Tulane University, and the afternoon session was held at Richardson Memorial Building on the Campus of Tulane. During this session Dr. C. W. Duval demonstrated cultures of bacillus lepræ and other pathological features of leprosy in his laboratory, which is situated in this building. There was a dinner or a smoker on the night of May 18th. The morning session of May 19th was ushered in by a clinic on pellagra at the Charity Hospital. After this the regular scientific session of the society was held in Hutchinson Memorial of Tulane University. Luncheon was served at noon, for which a subscription was requested. On Saturday, May 20th, an excursion was given to the Leper Colony.

The Use of Digipuratum in Heart Disease.

Wm. F. Boos, L. H. Newburgh and H. K. Marks in a paper published in the April issue of the Archives of Internal Medicine, discuss the great differences observed in the pharmacological strength of digitalis leaves and their preparations. The efficiency is said to depend greatly upon the soil, the gathering season, the method of collecting and drying the leaves and the methods used in preserving the dried product. For a time it seemed as if the pure active principles of digitalis would be reliable substitutes for the galenical preparations, but it was soon evident that neither digitalin nor digitoxin alone could produce the true digitalis effect obtainable from the leaf preparations. These facts show the need of leaf preparations of known strength. As the fluid preparations do not retain their original strength so readily, the dry standardized products are preferable. In Digipuratum, a dry digitalis extract was found free from the harmful digitoxin and 85% of the bulky and inactive matter. The drug is standardized by means of the frog experiment so as to be equal in strength to the equivalent amount of potent leaves, this strength being uniform.

Digipuratum was employed extensively by the authors in the Medical services of the Massachusetts General Hospital. Eight cases are quoted and tabulated, showing interesting features. The diuresis was efficient in all cases and a marked effect on the pulse rate was usually present. One case was sent to the hospital in a moribund condition, but reacted very quickly to the drug, so that compensation was re-established in a week. The digipuratum was usually given in the form of treatments of 12 tablets each, and while in some cases the first treatment gave little or no result, the second was always very efficient. Good results may often be obtained by combining the medication with venesection, the removal of fluid by tapping or by combining the digipuratum with other drugs, such as diuretin or apocynum.

Digipuratum has now been used in the Massachusetts General Hospital for over a year and more than 180 cases of primary heart disease or secondary cardiac involvement have been treated with it. The effect on the urinary output has been very prompt in most instances. There was not a single case of vomiting or diarrhea; in fact the vomiting of a number of cardiac cases at entrance was promptly stopped by digipuratum. Cumulative poisoning was never observed. One of the early patients, a boy of 16, was given 106 tablets in six weeks;

at no time was there any suggestion of digitalis poisoning. In one or two instances the house officers were made uneasy by sudden drops of forty or more beats in the pulse rate, but no disagreeable consequences followed in any case. It must be remembered, naturally, that digipuratum is a digitalis preparation, but the tendency to produce poisoning is much diminished so that it is possible by means of this drug of reliable strength to push digitalis therapy in a manner hitherto unknown.

The Passing of the Fluid Extract.

Close observers of the medical trend in these days are convinced that the fluid extract, the tincture, the elixir and other fluid galenicals are slowly but surely passing out of use and, in the end, will classify among "the crudities of yesterday".

One by one medical men are abandoning them—these old-time galenicals are too variable in composition and too uncertain in action to serve us longer. The trend of the times is toward the use of active principles of drugs instead of the crude drugs themselves. Ten years ago hardly fifty doctors used them—today fifty thousand practice medicine the alkaloidal way. Among them there are no nihilists. They have faith in medicine—they get results.

Active-principle granules convey the actual medicinal element of the drug freed from all inert matter. They are in every single instance accurate in dosage and true to label. They are more permanent than fluid medicines can possibly be. They are easy to take—acceptable to the most hard-to-please patient. They are—by reason of their small size and compactness—easy to carry and dispense. They produce a precise effect and deliver results in all cases where results can reasonably be expected.

We recommend that all our readers who are now interested in alkaloidal medication write to The Abbott Alkaloidal Company, Chicago, for some interesting literature.

Fruit and Drink in Typhoid.

The best form in which to give fruit in a case of typhoid fever is grapes, the skin and stones being very carefully removed. One way in which fruit is particularly of use is in warding off an attack of scurvy, which may often appear at the end of a bad and a long case of typhoid feqer. the first signs of its appearance usually being seen in the sponginess of the gums. In connection with drink it must be remembered that patients are usually very thirsty, and, as their temperatures are very high, they lose a large amount of water by the skin, and it is well therefore to give them plenty to drink.

There is no reason why they should not have pure water, and this may be iced, if required. The juice of oranges or lemons may also be given. Barley water is good and is often flavored with lemon, and they can have lemonade made of lemon water, sweetened with a little sugar if they prefer it. "Imperial" drink, often flavored with lemon, is a very good thing to give; but if extra nourishment is necessary, and thirst is excessive, albumen water is perhaps the best, that is, water to which the white of an egg has been added, the mixture being strained and well shaken up. It can be made in many strengt s, if the patient likes it; in the proportions of the white of one egg to one pint of water, or, if a concentrated form is required, the white of one egg mixed with an equal quantity of water.

Milk may be flavored with tea or coffee, or even cocoa. Iced coffee and iced tea are also given, and some patients like them very much indeed. They do no harm but, of course, netther the tea nor the coffee acts asfood.—The Practitioner, London.

Women and Drink.

The Liverpool Licensing Justices are proposing to issue special regulations with regard to the serving of women in public houses, of which the most stringent are that any woman, whose appearance is not respectable should be refused altogether, and that when women are served they shall be served only once, and shall not be allowed to treat each other to drinks. This "differential legislation," as the Charity Organization Review calls it, verges well nigh on the intolerable, and can only be the product of narrow-minded fanaticism on the part of the teetotal brigade. That disreputable persons of both sexes should be deprived of further liquor when in a state of intoxication is not only right but imperative; but that perfectly decent members of the female sex should be dictated to as to the number of glasses of alcoholic refreshment they may partake of, as well as to the sex of the person to whom they offer hospitality (for, as the Review points out, nothing is said of women treating men, nor of men treating women) amounts to almost a breach of the liberties of the subject, and the mere proposal of such specious legislation in these days of female suffragism can only tend to heap ridicule on the heads of its fantastic originators. Licensing Justices should remember that their very name indicates that they are appointed to administer justice and not to air their own views on a particular subject.—The London Hospital-Journal.

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

SUPPRESSED FUNCTIONS.

Thou shalt not!—and some propensity, sentiment, need or hope is suppressed. Lucky is the child whose parents are in enropporte with child life; but how few are so fortunate. Consequently, the average child reaches maturity as but a shadow of his real self. In maturity it is hands off! Keep off the grass! No trespassing! No admittance! No fishing, hunting or swimming allowed! The things we want to do are illegal and by some mysterious power we are obliged to do those things we do not want to do. As a result we become reprehensible, automatoms, or vain deceivers. So long as our physical state is impoverished our functions may be feeble and natures promptings few; our offenses, then, against law and propriety are of a puerile character. But with a vigorous body and abounding energy, we chafe under restraint, and are apt to waste our energy in frivolous pastimes or risk our liberty and reputation in transgressing established codes. Some one has said: it is not so much what we do that makes us trouble, but it is the getting caught. However this will not apply to the timid and conscientious.

While the bold and the unscrupulous may suffer as the result of their transgressions, the timid and the conscientious must suffer in silence as the result of suppressed or surreptitiously exercised functions; and, evidently, it is the latter who suffer most from nervous and functional disorders. Functional and nervous disorders are familiar subjects, and the problem of suppressed functions is appearing on the horizon. The reality of these things seems to have impressed the average doctor but lightly, and the average citizen not at all. But undoubtedly these subjects are the most interesting, and at present, the most important in human affairs.

While the symptom complex of suppressed functions and functional or psychic disorders may ultimately be the same,—and are generally recognized as nervous or mental, evidently each has its special causative factors and each may be found to present its distinguishing features. For instance, functions are suppressed through fear, devotion, authority or circumstances; when wholly suppressed, we would expect to find inertia, indifference, reservation, moroseness, frigidity, with explosions of passion and temper; when the functions are partly suppressed we would expect to find dallying, trifling, coyness, coquetry, deception, with fluctuations of the sentiments and emotions. The psychic or functional disorders arise from mental perversion and physical inefficiency, and may be recognized as unwarranted ambitions and aspirations or unnatural desires; such nervousness may be reduced to unwarranted expectations and painful disappointments.

When we stop to consider how few and how simple are the functions of the average person, and the demoralization associated with their suppression, we are led to enquire why any natural function should be suppressed. This leads to an investigation of our civil and social regulations, and, as the natural haunts of men,—the woods and the fields, are barred to the many, why parks and public places are not crowded,—after our homes are rendered habitable, our yards sanitary, and our many obligations fulfilled.

If we fail to perform our natural functions, is it through fear, authority, devotion, or circumstance; in either case the cause and the remedy are but matters of ideas and physical efficiency.

PULMONARY TUBERCULOSIS IN CHILDREN.

This disease is much more common among children than is generally believed. Recently it has been demonstrated that cavities exist quite frequently in young children. One reason that the medical profession has been slow to recognize this condition is partly on account of the difficulty in making a diagnosis, and possibly on account of the prevalent belief that the disease seldom exists among this class of patients.

Several prominent observers who have studied this disease among children believe that tubercular cavities are found in 33% of the autopsies that have been held.

There is another belief that has become quite prevalent. It is that quite a large per cent. of pulmonary tuberculosis in adults is a recurrence of the disease; the primary attack occurring during childhood. The findings in autopsies demonstrate the fact that the younger the individual, the less likely it is to be localized. Many cases of pneumonia in children, a disease that is quite frequent, are really tubercular in character.

If we were to make the same effort to find the tubercle bacilli in this class of patients that we do in adult patients, we would be surprised to find such a large per cent. of them to be tubercular in character.

Still there is one other condition that has not been mentioned until recently; that is, that pulmonary tuberculosis in children is much more apt to become a general infection than when it occurs in older people. For instance, in a very few days in a well marked case of pulmonary tuberculosis in children, every organ in the body becomes markedly involved. This is almost certain to occur. In adults it is not infrequent to observe well marked cases of pulmonary tuberculosis, and possibly no other organ in the body may be involved.

PELLAGRA.

Had one, prior to a comparatively recent date searched, rather superficially, the literature on pellagra he would have found the geographical distribution largely confined to Italy, Austrian Tyrol, Southwestern France, Spain, Roumania, Greece and Egypt, however, cases have been described in this country as early as 1864, although it has not been a great number of years that this disease has excited the interest of the American physicians who have busied themselves largely with the symptomatology, except Harris, who in addition described the pathological changes in the nervous system.

Before 1905 one viewed the disease as of fairly well established etiology, all holding spoiled maize responsible. Today, however, we stand in the dark, for recent investigations, while they have given us no definite information, have completely upset our equilibrium. The opinion expressed by Sambon after three months observation on the epidemicity of the disease has set us to wondering whether we shall accuse spoiled corn or a parasite conveyed by the sand-fly. A little later we encountered the views of Alessandrini who claims to have found the causative factor in water so that the disease is water borne and not "fly-conveyed."

Could we vouch for the correctness of the statements of Howard who maintains that, while the genus simulium is represented in this country by twenty-seven species, the simulium reptans is not found here, our enthusiasm for the sand-fly theory of Sambon would, at least, remain in the temperate zone. According to the investigations of Hunter the distribution of the sand-fly does not co-incide with the distribution of pellagra. Raubitschek's constantly negative results in applying anphylactic, serologic, complement deviation and other biological tests and the results of his experimental work on animals lead him to conclude that the theories of the cause of pellagra held at the present day are incorrect. He found that animals fed on corn manifest no symptoms of the disease so long as they were protected from the sunlight but if subjected to the action of these rays the animals emaciated and evinced phenomena of paralysis. Recovery occurred rapidly if affected animals were protected from the sun, soon after the onset of the symptoms. He maintains that pellagra is due to some toxic body developed in corn which becomes active when consumed by individuals exposed to the sun.

The disappearance of the disease synchronously either with the introduction of sound corn or the disuse of maize as a food, are facts which must not be overlooked. After France annexed Savoy the diet of northern Italy was maintained for a time in the last named place, but since 1860 the use of corn meal has subsided and pellagra disappeared. In Corfu the appearance of pellagra can be traced to the introduction of corn spoiled during transportation. In Biella, upper Italy, the prosperity of the inhabitants is such that they refuse to eat spoiled corn and consequently pellagra is not seen there, while in a neighboring prov ince the poverty of the people is such that they are compelled to eat what falls in their way, and here pellagra is frequently seen.

We are not in the least inclined to look askance upon progress; on the contrary, we hail it with delight; we are intensely interested in the evolution of new facts; we are engaged in research work. We are, however, not in a mood to jump and embrace enthusiastically all new work because it is new and regard it as a fact. One cannot follow the large number of investigations and not feel conscious that many are given to the press prematurely and unconfirmed. To keep up with the advances of medical science is made difficult by this means, for so much time is consumed weeding out the superficial from the good, the conscientious, the confirmed.

POLIOMYELITIS.

As a portal of entry the nasopharynx has again come into prominence. Since Gohn, working with Weichselbaum, called attention to the presence of the meningococcus in the secretions of the nostrils and nasopharynx, it has been a debatable question whether the organism enters or leaves the body through the nasopharynx. Those men who have done the most thorough work along this line regard the former as the more probable or both as correct.

Within the last year it has been demonstrated that substances capable of producing poliomyelitis also exist in the nasopharynx of human beings or animals suffering with this disease, but whether this anatomical structure is an exit or portal of

entry is still beyond the realm of fact, although the latter is probable.

In 1909 Landsteiner and Levaditi working independently found that the virus not only passed through a Berkefield filter but also existed in the saliva. The existence of the infecting principles in the saliva and in the secretions of the nasopharynx explains the ease with which the disease is transmitted. Wickman's observation of one thousand cases in the Swedish epidemic points to the contagious character of the malady and to the fact that in this disease also we may have to deal with "carriers," "virus carriers," the latter view being also supported by the experiments of Osgood and Lucas who were able to transmit the disease to animals by injecting the nasopharyngeal mucosa of monkeys which had survived the acute period of paralysis several months. Flexner and Clark speak of the possibility of abortive cases of infantile paralysis which may be important factors in the transmission of the disease.

In an effort to detect abortive cases they have instituted a neutralization test which is based upon the presumption that immune bodies exist in the blood of individuals or animals having survived an attack, either severe or mild. To apply the test the immune serum is mixed with the filtered virus and incubated at 37° C. for a few hours, after which time the mixture is injected into monkeys. If immune bodies are present the virus is made inert. By means of this test they hope to isolate cases that have suffered with the disease, the manifestations of which were too mild to attract attention.

Within the last four months another phase of this subject has crept into the literature through the writing of Fox and Rucker, who are working in the Laboratories of the Health Department of Pennsylvania. These investigators claim to have isolated a rod shaped organism from the blood of human individuals and monkeys suffering with poliomyelitis, which organism they maintain cannot be found in the blood of normal animals. According to their description the bacillus is 10 microns long, 0.8 microns wide, curved at one end, is Gram negative but stains readily with carbol-thionin and carbol fuchsin. In order to rule out cellulose the bodies were treated with iodine and sulphuric acid but no blue coloration took place. They state that in the filtered virus no stained organisms were found. These workers merely suggest that there may be an etiological relation between infantile paralysis and the new bacillus. The bacterium was never found in the nervous system.

Fox and Rucker may have discovered the organism causing infantile paralysis, but we cannot reconcile the results of their work with the fruits of the labor of the men who have struggled longest with the problem. The absence of the bacillus in the filtered virus which we know transmits the disease and the absence of the organism in the nervous system the site of the pathological changes to us are weak points if they insist to urge upon us this bacterium and a causative factor of poliomyelitis.

BACILLUS COLI COMMUNIS.

The work of Altmann and Rauth, Zeitschr., f. Immunitaetsforsch. und experiment. Therapie, vii, 5 and 6, revives an interest in the source of the bacillus typhosus. These investigators found that the growth of the bacillus coli communis on carbol-agar induced an alteration in its serological characters. If these results should, upon further investigation, be confirmed one would be lead to accept what has long been suggested by a few men that the bacillus typhosus is nothing more than an altered colon bacillus. We would then be better able to comprehend enteric fever as a water borne disease. The number of times the bacillus typhosus has been isolated from a water supply can almost be counted on the fingers of one's hands and yet the colon bacillus is frequently found in water and its absence is probably the best means to determine if a water supply is incapable of transmitting enteric fever.

One can readily conceive that as a result of a sojourn in water medium containing much organic matter a colon bacillus which had inhabited the intestinal tract for generations may produce an offspring with different biological, as well as serological characters, especially if the new generation be transferred to an individual, the intestinal tract of whom has become, as a result of predisposing factors, materially altered and so different from the intestinal canal of the animal which introduced the colon bacillus into the stream. There is no question about the loss or alteration of biological characters of the colon bacillus which in some instances may be regained by rejuvenation. For instance, a strain may not ferment dextrose, or may produce a very small amount of acid, or fail to elaborate indol, all of which characters are lacking in the biology of the bacillus typhosus.

Should the investigations of Altmann and Rauth be confirmed and should it be definitely shown that the bacillus typhosus was at one time a colon bacillus the term "bacillus typhosus" would not disappear. The results of these investigations would merely emphasize the necessity of search-

ing all drinking water very carefully for the colon bacillus. Nor would the results of the investigations materially alter our present classification of the Colon-Typhoid-Dysentery group of bacteria.

Would the term "paratyphoid" disappear? This question does not bring forth a response so quickly. The strictly scientific physician would unhesitatingly say "no," but the strictly practical man who does not lay all his weight on laboratory methods but takes them into consideration, would hesitate. In nearly all cases the clinical diagnosis of paratyphoid fever depends upon the agglutination reaction, and to this man it would appear superfluous to make a difference between two diseases so nearly alike that the diagnosis cannot be made at the bedside. He would probably not insist upon unity if all typhoid bacilli were clumped by all typhoid sera and all paratyphoid bacilli by all paratyphoid sera.

PULMONARY EMBOLISM.

It is not a great many years that a body occluding the pulmonary artery either before the bifurcation or in the neighborhood was considered as inevitably fatal. To the surgeon, however, nothing is invincible and with a bold determination he is now striving to successfully combat this condition. A study of these efforts are interesting developments in the evolution of the struggle to overcome the obstacles.

The first to attack this problem was Trendelenburg, of Leipsig, whose patient died soon after the operation. Not discouraged with this failure his first assistant struggled with the second case, which patient lived longer. Finding encouragement in this result Kreuzer, in 1909, sought to further the effort by operating upon a woman suffering with embolism of the pulmonary artery secondary to thrombosis of the iliac and hypogastric veins. The results of this operation is an excellent example of what determination and perseverance will accomplish. Notwithstanding the fact that the patient's heart ceased to beat twice, being resuscitated each time by means of massage, the condition was relieved, for death did not occur until five days afterward. The fatal termination was clearly due to the infection acquired at the time of the operation owing to insufficient time to permit thorough sterilization of the patient.

To meet these unexpected events Trendelenburg has installed an "emergency case" which contains, in a sterile condition, all the instruments used in an operation of this kind. The difficulty, however, is not so much in getting instruments sterile as it is in freeing the operative field of bacteria.

There is another feature with regard to the infection at the time of the operation that must be taken into consideration, and that is the part played by trauma incident to the operation. There is scarcely any doubt about the fact that after the patient has been thoroughly sterilized bacteria may still be present in the skin of the part to be incised and the greater the trauma the more favorable the media from the growth of the bacteria, as the part has lost in resistance in direct ratio to the trauma.

CHARLOTTE MEETING SOUTHERN RAILWAY SURGEONS.

The sixteenth annual meeting of the Surgeons of the Southern Railway was held in the assembly hall of the Selwyn Hotel at Charlotte, N. C., May 29-31.

Thirteen States were represented at this meeting, as follows: North Carolina, South Carolina, Virginia, Georgia, Alabama, Kentucky, Illinois, Mississippi, Indiana, Tennessee, Missouri and District of Columbia. The attendance was unusually large. Dr. Robert L. Gibbon, of Charlotte, who was chairman of the committee on arrangements for this meeting evidently put forth a special effort for the social pleasures of the visiting surgeons. On the evening of the first day's session a most elaborate smoker was tendered the visiting surgeons and the local profession of Charlotte at the Manufacturers Club, and on the evening of the second day, a second reception was given them at the Colonial Club. The visiting ladies were given a most enjoyable automobile ride over the city on the afternoon of the 30th.

Not only was the social affairs of this meeting a great success but also the scientific part of it.

A program, consisting of thirty papers was presented by some of the most distinguished surgeons of the South.

The meeting was called to order by Dr. Robert L. Gibbon, of Charlotte. The addresses of welcome were made by Mayor Charles A. Bland, on the part of the city, and Dr. Jno. R. Irwin, on behalf of the medical profession of Charlotte. The response to these addresses was to have been made by Dr. J. Howell Way, of Waynesville, N. C., but on account of his arrival in the city being somewhat delayed, Dr. Thos. E. Anderson, of Statesville, N. C., responded to the "Welcome" addresses in a most appropriate and entertaining manner.

The following program was carried out by the surgeons:

Call to Order—By Surgeon R. L. Gib-

bon, Chairman of the Arrangement Committee.

Prayer—Rev. A. A. McGeachy.

Address of Welcome—Honorable Mayor of Charlotte.

Address of Welcome—Dr. John R. Irwin of Charlotte.

Response to Welcome—Surgeon J. Howell Way of Waynesville.

Report of Committee on Arrangements.

Introduction of President.

President's Address—Surgeon W. C. Day of Danville, Va.

Report of Committee on Program.

Report of Committee on New Members.

Report of Committee on Necrology.

Report of Executive Committee.

Report of Secretary and Treasurer.

"Soil and Water Polution—The Common Carrier as a Factor"—Surgeon F. A. Webb, Calvert, Ala.

"Water as a Therapeutic Agent"—Surgeon J. M. Caldwell, Blacksburg, S. C.

To open discussion on 1 and 2—Surgeon T. A. Crawford, Rock Hill, S. C.

"Importance of Careful Diagnosis in Railroad Surgery"—Surgeon W. P. Horton, North Wilkesboro.

To Open Discussion—Surgeon J. H. Mitchell, Mount Vernon, Ill.

"Report of Case of Carbolic Acid Poisoning"—Surgeon T. D. Walker, Sr., Cochran, Ga.

To Open Discussion—Surgeon B. B. Blankenship, Maryville, Tenn.

To open Discussion—Surgeon B. B. Sims, Talladega, Ala.

"The Old Time Doctor"—Surgeon J. P. Blankenship, Maryville, Tenn.

To Open Discussion—Surgeon G. M. Burdett, Lenoir City, Tenn.

Report of Cases—"Shoulders and Elbow Injury—Treatment and Results"—Surgeon W. T. Mathews, Greenwood, Miss.

To Open Discussion—Surgeon W. M. Cunningham, Corona, Ala.

"Railway and Surgical Shock—Indications and Contra-Indications in Management"—Surgeon W. R. McKinley, Columbus, Miss.

To Open Discussion—Surgeon C. P. Fox, Greenville, Tenn.

"Iodine in the Treatment of Wounds"—Surgeon Ambrose McCoy, Jackson, Tenn.

To Open Discussion—Surgeon George Ross, Richmond, Va.

"Treatment of Twenty-seven Burns Simultaneously"—Surgeon J. F. Alexander, Blocton, Ala.

To Open Discussion—Surgeon W. H. Wilder, Birmingham, Ala.

"The Duty of the Railway Surgeon to the Attorney and the Patient"—Surgeon Edward Alcorn, Hustonville, Ky.

To Open Discussion—Surgeon J. M. Thomas, Griffin, Ga.

SPECIAL ORDER.

Paper by Surgeon C. P. Whertenbaker, U. S. M. H. S., Norfolk, Va. Subject "Railway Sanitation."

SYMPOSIUM ON HEAD AND SPINAL INJURIES.

"Diagnosis of Injuries to Head"—Surgeon H. A. Royster, Raleigh, N. C.

"Head Injuries"—Surgeon T. P. Satterwhite, Louisville, Ky.

"Surgical Treatment of Injuries to the Skull"—Surgeon R. L. Payne, Jr., Norfolk, Va.

"Delayed Reaction in Concussion of the Brain: Report of a Case"—Surgeon T. F. Robinson, Bessemer, Ala.

"Cerebral Concussion: Report of a Case"—Surgeon H. T. A. Lemon, Washington, D. C.

"Moral Influences of Diagnoses of Injury to Head and Spine"—Surgeon J. H. Mitchell, Mount Vernon, Ill.

"Spinal Shakeups, Lame Backs and Railway Spines"—Surgeon A. S. Priddy, Lynchburg, Va.

"Late Effects of Spinal Injuries"—Surgeon H. J. Williams, Macon, Ga.

"Injuries of Cervical Region of Spine"—Surgeon Lucien Lofton, Emporia, Va.

"Plaster of Paris Jacket in Treatment of Spinal Injuries"—Surgeon A. R. Shands, Washington, D. C.

"Spinal Injuries and Their Treatment by Modern Methods"—Surgeon J. C. Walton, Richmond, Va.

The discussion of the papers of this symposium will be opened by Surgeon S. R. Miller, Knoxville, Tenn., reading

"Some Points in the Treatment of Brain and Spine Cases."

Other leaders in this discussion are:

Surgeon W. W. Harper, Selma, Ala.

Surgeon T. H. Hancock, Atlanta, Ga.

Surgeon B. G. Copeland, Birmingham, Ala.

Surgeon J. P. Salb, Jasper, Ind.

Surgeon W. K. Vance, Bristol, Tenn.

Surgeon D. A. Stanton, High Point, N. C.

"Foreign Bodies in the Eye"—Surgeon-Oculist H. H. Briggs, Asheville, N. C.

To Open Discussion—Surgeon-Oculist W. H. Wakefield, Charlotte, N. C.

"Erysipelas and its Relation to Eye Injuries"—Surgeon-Oculist E. F. Parker, Charleston, S. C.

To Open Discussion—Surgeon-Oculist J. W. Jervey, Greenville, S. C.

"Fracture of the Femur Complicated by Gangrene of the Leg"—Surgeon O. B. Ormsby, Murphysboro, Ill.

"Simple Fracture of Femur and Fibula

and Compound Comminuted Fracture of Tibia of Same Side with Cerebral Concussions: Limb Saved"—Surgeon E. M. Magruder, Charlottesville, Va.

To open the discussion on 25 and 26—Surgeon Rhett Goode, Mobile, Ala.

The officers for the ensuing year are as follows:

President, Surgeon J. H. Mitchell, of Mount Vernon, Ill.

First Vice President, Surgeon R. L. Gibbon, of Charlotte, N. C.

Second Vice President, Surgeon R. T. Ramsey, of Elba, Va.

Third Vice President, Surgeon F. A. Webb, of Calvert, Ala.

Fourth Vice President, Surgeon W. R. McKinley, of Columbus, Miss.

Secretary-Treasurer, Surgeon J. U. Ray, of Woodstock, Ala.

Executive Committeeman, Surgeon C. L. Guice, of Gadsden, Ala.

PRELIMINARY PROGRAM AND ANNOUNCEMENTS Of the Fifty-Eighth Annual Session of the Medical Society of the State of North Carolina

CHARLOTTE, JUNE 20 to 22, 1911.

Officers

C. M. VAN POOLE, M. D., Salisbury, President.

J. VANCE M'GOUGAN, M. D., First Vice-President, Fayetteville.

DR. S. A. STEVENS, Monroe, Essayist.

DR. JOHN M'CAMPBELL, Morganton, Leader of Debate.

Committee of Arrangements

Dr. E. C. Register, Chairman, Charlotte.
Dr. A. M. Whisnant, Charlotte.
Dr. John R. Irwin, Charlotte.
Dr. A. J. Crowell, Charlotte.
Dr. J. E. S. Davidson, Charlotte.
Dr. J. R. Alexander, Charlotte.

Dr. J. P. Munroe, President of the North Carolina Medical College, will deliver the address of welcome on the part of the Mecklenburg County Medical Society, and Mayor Charles A. Bland, Charlotte, will deliver the address of welcome on the part of the city. Dr. G. T. Rowe, will say the invocation. Dr. E. G. Moore, of Elm City, will respond to address of welcome.

On Tuesday afternoon at six o'clock, th members of the association will be invited to take an automobile ride of one hour. On Wednesday evening from 9:30 to 12:00 there will be a general reception at the Manufacturer's Club. The members of the association, and their wives, and the ladies and gentlemen of the city will be invited to attend.

The general meetings of the society will be held at the County Court House, on South Tryon Street.

The local committee of arrangements recommend the following hotels: The Selwyn, The Central, The Buford and The Stonewall. They are all good hotels and their rates range from $2.00 a day up.

NOTICE

Excursion fares on the certificate plan to Charlotte, N. C., from all points in North Carolina on lines parties hereto, and from Norfolk, Portsmouth, Suffolk, Richmond, Boykin and Danville, Va., on account of Medical Society of the State of North Carolina (Charlotte) June 20-22, 1911.

Fares

Delegates and members attending meeting specified herein and who hold certificate receipts secured from and executed by agents at starting points, evidencing payment of tariff fare to place of meeting will be sold tickets for return trip under the above rules and regulations at one-half of first-class fare, in effect from place of meeting to original starting point plus 50 cents.

You are cordially invited to be present at the next meeting of the Medical Society of the State of North Carolina to be held in Charlotte, June 20-22, 1911.

The character of the papers will be of the best, as can be seen from this preliminary and provisional program.

Reduced rates will be in effect on all railroads leading into Charlotte. Engage your rooms early.

Communications in regard to corrections in this program or additions thereto can be made by addressing the secretary, D. A. Stanton, High Point, if they are made not later than June 10, 1911.

The entertainment of the members of the State Society by the committee of arrangements will be in keeping with the standing of the medical men of Charlotte. You will enjoy attending this meeting.

The first session of the House of Delegates, will be held Tuesday, 2:30 p. m.

Tuesday Morning, June 20

10:30 a. m., Society called to order by chairman committee of arrangements, Dr. E. C. Register, Charlotte.

Prayer by Rev. Dr. G. T. Rowe.

Dr. J. P. Munroe, President of North Carolina Medical College will deliver the address of welcome on the part of the Mecklenburg County Medical Society, and Mayor Charles A. Bland, of Charlotte, will deliver the address of welcome on the part of the city.

Response to address of welcome, Dr. E. T. Moore, of Elm City.

Introduction of President, Dr. C. M. Van Poole.

President's annual address—"The Importance of Thorough Literary Training Prior to Entering the Medical Profession and High Ideals After Entering the Same —Some Remarks as to the Work and Needs of the Society."

Tuesday, June 20, 11:30 a. m.

Section of Gynecology—Dr. J. W. Long, Chairman, Greensboro.

"Pelvic Infection"—Dr. J. W. Long, Greensboro.

"Cancer of the Uterus Operable and Irremovable"—Dr. J. T. Burrus, High Point.

Subject Not Announced—Dr. H. McKee Tucker, Raleigh.

Section Obstetrics—Dr. S. M. Mann, Chairman, Moyock.

"A Review of the Problems Confronting the Successful Practice of Obstetrics"—Dr. S. M. Mann, Moyock.

"The Toxemia of Pregnancy"—Dr. J. W. Newbern, Jarvisburg.

"Meddlesome Midwifery"—Dr. John L. Spruill, Columbia.

"Placenta Praevia"—Dr. C. J. Lawrence, Windsor.

Wednesday, June 21, 10 a. m.

Section Materia Medica and Therapeutics—Dr. W. P. Ivey, Chairman, Lenoir.

"Therapeutic Nihilism"—Dr. W. P. Ivey, Lenoir.

"The Pyramidon Treatment of Typhoid Fever"—Dr. W. C. Brownson, Asheville.

"Some Observations on the Treatment of Gastro-Intestinal Diseases"—Dr. C. W. Moseley, Greensboro,

"The National Formulary"—Dr. R. L. Felts, Durham.

"The Principles of Diet"—Dr. A. W. Calloway, Asheville.

Subject Not Announced—Dr. R. D. Jewett, Winston-Salem.

Section Practice of Medicine—Dr. John C. Wessell, Chairman, Wilmington.

"Errors in Diagnosis"—Dr. J. C. Wessell, Wilmington.

"Biliary Cirrhosis"—Dr. R. B. Hayes, Fayetteville.

"Possibilities of Preventive Medicine"—Dr. W. J. McAnally, High Point.

Subject Not Announced—Dr. W. deB. Mac Nider, Chapel Hill.

12 M. Wednesday, June 21.

Conjoint Session State Board of Health—Dr. W. S. Rankin, Secretary.

Conference on Hookworm to follow Conjoint Session.

"Relation of the Eradication of Hookworm Disease to the Eradication of Other Preventable Diseases"—Dr. John A. Ferrell, Asst. Sec. to N. C. Board of Health for Hookworm Disease.

Conference on Hookworm Disease—Dr. John A. Ferrell, Asst. Sec. to N. C. Board of Health, Raleigh.

"The Importance of Mild Cases of Hookworm Disease"—Dr. B. W. Page, Raleigh.

"The Effect of Sanitation on Hookworm Infection"—Dr. C. L. Prigden, Raleigh.

"Hookworm Disease in Its Relation to the White and Negro Races"—Dr. Strosnider, Raleigh.

"Study of the Results of Treatment of Hookworm Disease"—Dr. Hubert Haywood, Raleigh.

"The Significance of Hookworm Disease"—Dr. C. S. Grayson, High Point.

Section Physiology and Chemistry—Dr. W. P. Whittington, Chairman, Asheville.

"Thyroid Insufficiency in Children"—Dr. P. R. McFayden, Randleman.

"Internal Secretions"—Dr. H. B. Weaver, Asheville.

"Traits and Taints"—Dr. H. D. Stewart, Monroe.

Wednesday, June 21, 10 a. m.

Section Anatomy and Surgery in Separate Hall—Dr. W. A. Graham, Chairman, Durham.

"Border Line Cases"—Dr. W. A. Graham, Durham.

"Backache from a Surgical Standpoint"—Dr. J. M. Parrott, Kinston.

"Surgical Treatment of Acute and Chronic Pancreatitis, with Report of Cases"—Dr. R. L. Gibbon, Charlotte.

"Stab Wound of the Heart, Drainage of Pericardium, Recovery"—Dr. H. S. Lott, Winston-Salem.

"Surgery of the Gall Bladder"—Dr. Henry Norris, Rutherfordton.

"Raynaud's Disease, Symptoms and Treatment with Report of Case"—Dr. J. Ernest Stokes, Salisbury.

"The Importance of the Omentum to the Surgeon"—Dr. J. F. Highsmith, Fayetteville.

"Some Important Points in Diagnosis and Treatment in Disease of Bone"—Dr. J. A. Williams, Greensboro.

"Mortality in Appendicitis"—Dr. A. M. Willis, Richmond, Va.

"Operative Treatment of Fractures"—Dr. Joseph Graham, Durham.

"Intersusception in an Adult with Report of Case"—Dr. John Nicholson, Washington.

"A New Instrument for Gastro-Enterostomy and its Practical Application"—Dr. Addison G. Brenzier, Charlotte.

"Treatment of Syphilis"—Dr. A. J. Crowell, Charlotte.

Section Medical Jurisprudence and State Medicine—Dr. I. M. Taylor, Chairman, Morganton.

"School Hygiene and Sanitation"—Dr. Thomas S. Jordan, Raleigh.

"The Relation of the Doctor to Public Health as Regards Tuberculosis"—Dr. Thos. M. Jordan, Raleigh.

"How Shall We Prevent Feeble Mindedness?"—Dr. E. R. Johnston, Vineland, N. J.

"The Medico—Legal Aspect of the Nellie Cropsey and the Gibbs Cases"—Dr. Oscar McMullan, Elizabeth City.

"Inspection of School Children for Defects of the Eye, Ear, Nose and Throat"—Dr. W. Perry Reaves, Greensboro.

Thursday, June 22, 11 a. m.

Section Pathology and Microscopy—Dr. R. H. Lafferty, Chairman, Charlotte.

"Pathology and Microscopy in Medicine"—Dr. R. H. Lafferty, Charlotte.

"A Perithelioma of the Prostate with a Resume of this Class of Tumors"—Dr. Harland Shoemaker, Shelby.

"Recent Cancer Research"—Dr. J. B. Powers. Wake Forest.

"The Use of Antiformin in Examining Serous Pleural Effusion for B. Tuberculosis"—Dr. William Allan, Charlotte.

"The Relative Value of the Various Tests for the Diagnosis of Tuberculosis"—Dr. C. C. Orr. Asheville.

Subject Not Announced—Dr. J. P. Munroe, Charlotte.

Section Railway Surgery—Dr. G. G. Thomas, Chairman, Wilmington.

Thursday, June 22, 2 p. m.

Section Pediatrics—Dr. W. H. Anderson, Chairman, Wilson.

"Atypical Scarlet Fever with Report of Case"—Dr. W. H. Anderson, Wilson.

"Tuberculosis in Children"—Dr. Paul H. Ringer, Asheville.

"Adenoids"—Dr. Joel D. Whitaker, Raleigh.

"Infant Feeding"—Dr. K. C. Moore, Wilson.

"Mental and Physical Hygiene in School Children"—Dr. P. V. Anderson, Morganton.

"Report of Case of Scarlet Fever with Pseudo Relapse"—Dr. C. A. Woodard, Durham.

"Bullous Pellagra"—Dr. H. B. Best, Wilson.

Miscellaneous Papers

"Intestinal Tuberculosis"—Dr. Samuel C. Gant, New York, N. Y.

"Further Observation as to the Diazo Reaction in Tuberculosis; With Interesting Observations as to Racial Differences in White and Black"—Dr. J. R. Williams, Hendersonville.

"Rheumatism, Further Discussion of an Old Subject"—Dr. J. N. Upshur, Richmond, Va.

"Control of the Recent Outbreak of Smallpox in Wilmington"—Dr. Joseph Akerman, Wilmington.

"The Removal of Tonsils under General Anesthesia"—Dr. Joel Whitaker, Raleigh.

"The Gradual Reduction Method, or The Quick Withdrawal, or Hyoscine Method in the Treatment of the Morphine Habit"—Dr. W. C. Ashworth, Greensboro.

"Serum Diagnosis of Syphilis"—Dr. J. W. Squires, Charlotte.

"Turbinotomy Submucous"—Dr. M. M. Saliba, Wilson.

"Quit You Like Men"—Dr. J. E. Brooks, Aberdeen.

"Treatment of Ileo-Colitis"—Dr. K. P. B. Bonner, Morehead City.

"Submucous Resection of the Nasal Septum"—Dr. H. W. Carter Washington.

"Some Phases of the Tuberculosis Problem"—Dr. M. E. Street, Glendon.

"The Need of Definite Action in the Tuberculosis Campaign in N. C."—Dr. C. A. Julian, Thomasville.

"Symptomatology and Diagnosis of Nephritis"—Dr. William Jones, High Point.

"Prostatic Utricle"—Dr. W. F. Cole, Greensboro.

"Phlebitis of the Femoral Veins Following Surgical Operations in the Pelvis"—Dr. R. O. Dees, Greensboro.

"Personal Observation Regarding Ether and its Administration"—Dr. C. O. Abernethy, Raleigh.

"The Duty the Doctor Owes to the People on the Subject of Cancer—Also Report of Case"—Dr. W. O. Spencer, Winston-Salem.

"Nitrous Oxid-Oxygen Anesthesia"—Dr. J. H. Culpepper, Norfolk, Va.

"The Reduction of Infant Mortality"—Dr. Chas. Roberson, Greensboro.

Subject Not Announced—Dr. A. B. Croom, Maxton.

"The Aims and Purposes of the State Board of Medical Examiners"—Dr. B. K. Hays, Oxford.

"Determination of the Renal Function by Means of Phenolsulphonephthalain and its Value in the Diagnosis and Prognosis of Kidney Affections"—Dr. John T. Geraghty, Baltimore.

"Recent Thought and Methods in Gastro-Intestinal Disease"—Dr. W. O. Nesbit, Charlotte.

"Acute and Chronic Otitis Media"—Dr. H. W. MacConnell.

EDITORIAL NEWS ITEMS.

Dr. A K. Tayloe, of Washington, N. C., has been detailed by the government to go to the front as a surgeon in the regular army. He left for the Mexican border the grst of the month.

Dr. Joshua Tayloe, of Washington N. C., is rapidly recovering from a recent operation at the Washington hospital. His condition was serious at one time.

Dr. R. O. Dees, of Bayboro, N. C.,is now in Chicago taking post-graduate work. He will be away until July 1.

The Pamlico, N. C., Medical Society held a special meeting, April 12, and elected their officers for the new year as follows: Dr. G. S. Attmore, Stonewall, President. Dr. S. E. McCotter, Bayboro, Sec-Treas,

Morehead City Hospital.

Morehead City. N. C.

The announcement that Morehead City, N. C., has a hospital will be hailed with delight by physicians throughout North Carolina. For years they have felt the need of one there. During the past 50 years hundreds of people have gone there in search of health and have never gone away disappointed. Heretofore they have been able to accommodate only the convalescents and chronic cases which could travel without assistance. With the opening of this hospital they are enabled to take care of any kind of disease except contagious ones. Morehehead City is too well known as an ideal health resort to need any introduction at our hands.

This hospital is located in the heart of the city, one block from the depot, and one block from Bogue sound. The water is in plain view from nearly every window; the location could not have been better situated for this purpose.

The proximity to the sea makes this an ideal institution for the treatment of diseases of children, as such cases rapidly get better in this salt air climate. A special department for little patients will be provided.

The Morehead City Hospital is not owned by any one or two physicians, and therefore is not run for the benefit of any one or two men. Nearly every business man, of any note, in the city has a financial interest in this institution.

A modern and up to-date operating room, with every facility for handling operative work, has been provided. Two large and attractive wards and four roomy private apartments furnish accommodation for 20 patients without crowding. A callbell system has been installed in every room, and the whole house is lighted by electricity. Water, both hot and cold, is supplied in abundance througout the building.

An experienced graduate nurse is in charge, capable and intelligent assistants aid her in the nursing department.

The doctors of the Second district of North Carolina met in Newberne, the night of May 3, and organized the Second District Medical Society. Quite a fair percentage of the profession was present. The meeting was held in the reading-room of the Elks' Club, and the following officers were elected:—Dr. D. T. Tayloe, Washington, president; Dr. R. S. Primrose, Newbern, 1st vice-president; Dr. W. H. Dixon, Ayden 2d vice-president;Dr. K. P. B. Bonner, Morehead City, Sec.-Treas. Dr. J. C. Rodman, Washington, Leader of Debate.

Washington, N. C., was selected as the place of meeting for the October session.

After the organization was completed, the society was tendered an informal smoker given in its honor by the Craven County Medical Society.

Deaths.

Dr. J. M. Hollingsworth, one of the leading physicians of Mount Airy, N. C., was found dead on April 12th.

He was a graduate from the College of Physicians and Surgeons, of Baltimore, having completed his course in medicine there in 1886.

Dr. W. A Murdock, of Balsam, N. C., was found dead in his bedroom on April the 13th. Cause of death, heart failure.

Book Notices.

Manual of Diseases of the Ear, Nose and Throat. By John Johnson Kyle, B. S., M. D., Professor of Otology, Rhinology and Laryngology, Indiana University School of Medicine; Otologist, Rhinologist and Laryngologist of City Hospital, St. Vincent's Hospital and City Dispensary, Indianapolis; Fellow of the American Academy of Ophthalmology and Oto-Laryngology, and Fellow of the American Laryngological, Rhinological and Otological Society; Member of the Military Surgeons of the United States; Late Major and Surgeon, U. S. Vol.; First Lieutenant, Medical Reserve Corps, United States Army. Third Edition. Revised and Enlarged. With 176 Illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1911. The author has endeavored in the prepar-

ation of the third edition of this volume to make it in every way more complete by adding much essential information.

In the consideration of diseases, the author has discussed largely the subject of tonsillectomy, altering somewhat the previous conception of this operation.

The subject of suppuration of the labyrinth has been given a more thorough discussion in this than in the former editions of this work.

The book is attractively bound in black flexible leather, containing 670 pages of carefully indexed reading matter.

It is with pleasure that we call the attention of our readers to this volume.

Vaginal Celiotomy. By S. Wyllis Bandler, M. D., Adjunct Professor of Diseases of Women, New York Post-Graduate Medical School and Hospital. Octavo of 450 pages, with 148 Illustrations. Philadelphia and London: W. B. Saunders Co. 1911. Cloth, $5.00 net; Half Morocco, $6.50 net.

The author of this volume gives us his experiences along the lines of Vaginal Celiotomy, which dates back to 1875.

We consider the volume of great value to the medical profession. The text is clear and concise, and all physicians who are especially interested in this particular line of work should not fail to study Dr. Bandler's policies and methods.

The illustrations used in this volume are above the ordinary, and each one is seemingly well arranged.

The excellent quality of enamel paper used in this book adds much to its appearance.

1000 Surgical Suggestions. By Walter M. Brickner, B. S., M. D., Adjunct Surgeon Mount Sinai Hospital, Editor-in-Chief American Journal of Surgery, with the collaboration of James P. Warbasse, M. D., Harold Hays, M. D., Eli Moschcowitz, M. D., and Harold Neuhof, M. D. 225 pages. Cloth bound, Semi-de Luxe, $1.00. Full de Luxe, Leather, $2.25. Surgery Publishing Company, 92 William Street, N. Y. U. S. A.

This is one of the biggest little books ever presented to the profession. In its 225 pages are found a collection of 1000 epigrammatic succinct, virile and instructive hints based upon actual experience and every one a lesson in itself.

The Suggestions are so arranged and indexed that all subjects covered can be immediately referred to and the particular hint upon any particular subject immediately found. It bristles with pointed and useful suggestions which in many cases might just turn the scale from failure to success. Its mechanical presentation is a feature worthy of mention. It is square cloth bound stamped in gold, printed upon India Tint paper with Cheltenham type, with special marginal side headings in red. A dollar could not be better invested than in the purchase of this book.

The Practical Medicine Series, Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the General Editorial Charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School; Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume II.

General Surgery. Edited by John B. Murphy, A. M., M. D., LL. D., Professor of Surgery in the Northwestern University; Attending Surgeon and Chief of Staff of Mercy Hospital, Wesley Hospital, St. Joseph's Hospital and Columbus Hospital; Consulting Surgeon to Cook County Hospital and Alexian Brothers Hospital, Chicago, Ill. Series 1911. Price $2.00. Chicago: The Year Book, Publishers, 180 N. Dearborn St.

This volume is one of a series of ten issued at about monthly intervals, and covering the entire field of medicine and surgery. Each volume being complete for the year prior to its publication on the subject of which it treats.

This volume II of the 1911 series is the General Surgery edition. Both the simple and more complex points in surgery receive attention in this volume. Much emphasis is laid on the importance of sterilization, anæsthesia, etc. Especial attention is also directed to the frequency of perforations in typhoid fever being overlooked and not properly treated.

This volume, like all former editions of this series, is attractively bound. The illustrations are very fine, and withall we consider the book of vital importance to the medical profession.

Golden Rules of Diagnosis and Treatment of Diseases, Aphorisms, Observations, and Precepts on the Method of Examination and Diagnosis of Diseases, with Practical Rules for Proper Remedial Procedure. By Henry A. Cables, B. S., M. D., Professor of Medicine and Clinical Medicine of the College of Physicians and Surgeons, St. Louis; consultant at Jefferson Hospital, St. Louis; formerly House Physician at Alexian Brothers Hospital, St. Louis; member of the American Medical Association, Illinois State Medical Society, etc. St. Louis: C. V.

Mosby Company. 1911.

The authors object in writing this volume was to assist busy physicians, and the progressive student in obtaining the needed information readily and authentically, and without studying the many large volumes that have been published on this subject.

This book is an epitome of a careful and extensive examination of the literature on the subjects considered, supplemented by the authors experience in private and hospital methods of compilation and manner of presentation of demonstrated facts have been found to be the best for the purpose in view.

This book, while small in volume, contains an immense amount of practical and theoretical reading matter.

The print is good and the general architecture of the book is fine. It certainly gives us a great deal of pleasure to recommend this book to our readers.

Report from the Pathological Department Central Indiana Hospital for Insane. 1906-7, 1907-8. Indianapolis: Wm. B. Burford, Contractor for State Printing and Binding. 1910.

This little book containing a list of the examinations made in the pathological department of this large hospital for the insane is neatly and attractively bound. It gives a clear idea of the excellent policies, methods and results of this department of the institution.

Report from the Pathological Department Central Indiana Hospital for Insane. Fiscal year 1908-1909. Indianapolis: Wm. B. Murford, Contractor for State Printing and Binding.

This little volume contains a summary of the work done in the Medical Department of this institution for the fiscal year beginning October 1, 1908, and ending September 30, 1909. This work is divided into three parts as follows:

1. The Clinical work, summarized by the Clinical Psychiater, Max A. Bahe, M. D.

2. The Pathological work, summarized by the Pathologist, J. Allen Jackson, M.D.

3. Papers prepared for publication.

The work of Dr. Bahe presents for the first time in the history of this institution, a summarized statement of the clinical work obtained from a systematized method of investigation.

The papers presented in this book are very fine indeed, and are both interesting and valuable.

The book is nicely bound, and is much larger than the volume containing the first report of this institution.

Diagnostic Methods. Second Edition Revised. A Treatise on Diagnostic Methods of Examination. By Prof. Dr. Hermann Sahli, Director of the Medical Clinic, University of Bern. Edited, with additions, by Nathaniel Bowditch Potter, M. D., Assistant Professor of Clinical Medicine, College of Physicians and Surgeons, New York. Octavo of 1229 pages, containing 472 illustrations. Philadelphia and London: W. B. Saunders Co. 1911. Cloth, $6.50 net; Half Morocco, $8.00 net.

The revisal of this work has added much to its value to the medical world. Prof. Sahli's first translation of this work met with greater popularity than the author had even expected.

The errors that crept into the first translation have been corrected in this edition, and much new matter has been added. Several new cuts have also been inserted.

This volume contains 1229 pages of carefully indexed reading matter.

This book will unquestionably be accepted by the medical profession as one of great value.

State Board Questions and Answers. By R. Max Goepp, M. D., Professor of Clinical Medicine at the Philadelphia Polyclinic. Second Edition Revised. Octavo volume of 715 pages. Philadelphia and London: W. B. Saunders Company. 1911. Cloth, $4.00 net; Half Morocco, $5.50 net.

The material for this volume was selected from State Board questions asked during the past four years.

The original phraseology has been retained, and only the most obvious errors have been corrected. While the purpose of the book is to provide a convenient compend for the use of those who wish to prepare themselves for State Board Examinations, a certain order has been adopted in the arrangement of the questions, and a few simple and obvious questions have been interpolated here and there in order to maintain the continuity of the subject.

It gives us a great deal of pleasure to recommend this volume, which is neatly and attractively bound, to the medical students and younger members of the profession.

Diagnostic and Therapeutic Technic. By Albert S. Morrow, M. D., Adjunct Professor of Surgery, New York Polyclinic. Octavo of 850 pages, with 815 original line drawings. Philadelphia and London: W. B. Saunders Company. 1911. Cloth, $5.00 net.

In this volume the author has made an effort to bring together and arrange in a

manner easily accessible for reference, a large number of procedures employed in diagnosis and treatment.

While some of the methods herein detailed belong essentially to the domain of the specialist, the majority of them are the every-day practical procedures which the hospital interne or the general practitioner may at any time be called upon to perform.

All important steps are illustrated so that the reader may grasp at a glance the technic of the various procedures.

The illustrations in this book show that no expense has been spared in this line.

The binding is neat and attractive.

The Surgery of Childhood, Including Orthopædic Surgery. By De Forest Willard, A. M., M. D., (Univ. of Pa.), Ph. D., Professor of Orthopædic Surgery, University of Pennsylvania; Surgeon (26 years) to the Presbyterian Hospital; Surgeon-in-chief Widener Industrial School for Crippled Children; Ex-President American Surgical Association, American Orthopædic Association, Philadelphia Academy of Surgery, Philadelphia County Medical Society; Ex-Chairman Surgical Section American Medical Association; Fellow Philadelphia College of Physicians, etc. With 712 Illustrations, Including 17 in colors. Philadelphia and London: J. B. Lippincott Co.

One of the principal objects of this book is to induce the earlier examination and recognition of the diseases of childhood.

The author's endeavor in this work has been to select and present methods of diagnosis and treatment that by long experience have proved to be of rational service along these lines, and we feel, after a careful examination of his book, that his efforts and experiences have been made plain to the reader of this volume.

The subjects discussed are classified practically and conveniently for the reader and student of medicine.

As the study of living anatomy is of great importance, many Roentgenograms have been introduced into this volume. In this book are answered some of the many questions that have been submitted to the author during his long experience in this kind of work.

The volume is beautifully bound, and its general architecture is splendid. The illustrations are numerous, and the engravers are to be congratulated upon their magnificent work in making the cuts.

The Principles and Practice of Modern Otology. By John F. Barnhill, M. D., Professor of Otology, Laryngology, and Rhinology, Indiana University School of Medicine; and Ernest de W. Wales, B.S., M. D., Clinical Professor of Otology, Laryngology and Rhinology, Indiana University School of Medicine. Second edition revised. Octavo of 598 pages, with 305 original illustrations, many in colors. Philadelphia and London: W. B. Saunders Company. 1911. Cloth, $5.50; Half Morocco, $7.00 net.

In the second edition of this work, not many extensive changes have been made. Among the most important additions to the former volume are the following: 1. The chapter on the examination of the functions of the ear has been entirely rewritten, and includes the description and formula of a uniform system of tests accepted by the Eighth Otological Congress at Buda-Pesth in 1909. 2. A more extended statement regarding operative injury to the facial nerve. 3. A description of the "Conservative" Radical Mastoid Operation, commonly called the Heath operation. 4. Several paragraphs relating to the symptoms, pathology, and surgical treatment of Labyrinth Suppurations.

Dr. Barnhill has certainly been successful in his efforts to make this work of real value to the student of medicine as well as the practitioner.

This volume contains 598 pages of carefully indexed reading matter, including a great many magnificent illustrations.

We take great pleasure in recommending this book to the medical profession.

Abstracts of the Leading articles of the month.

Undiluted Citrate Milk.—Mann, in the Guy's Hospital Gazette, explains very clearly the method of feeding infants on undiluted cow's milk which has been for three years adopted at the Evelina Hospital. So great a revolution is bound to excite incredulity, but the author acknowledges himself a converted sceptic, and his list of cases showing the weekly weight of the infants concerned is one which speaks for itself. Only six babies out of his last four hundred have had to be placed upon other forms of diet. Three facts, he says, have to be remembered: that the great stumbling-block to digestion is the casein clot from cow's milk, and that mere dilution does not remove this difficulty; secondly, that the addition of sodium citrate to each undiluted feed leads to the formation of a much less dense clot; lastly, that the bulk of each feed is small, and hence vomiting is much less likely. In practice the mother is provided with a solution of sodium citrate in

water containing as many grains to the drachm as there are ounces in each feed. She is told to put a teaspoonful into the milk; to stir and warm until the food is steaming, and then to cool down to the proper temperature. The amount of each feed and the total quantity per diem depend upon the size of the child and not upon its age. At six months and upwards two pints in twenty four hours can be taken by many children; but even at a month and less still there is ample evidence in the Dr's. statistics to show that small infants can thrive remarkably well on this undiluted citrated cow's milk.

The Administration of Tuberculin.—Latham (British Journal of Tuberculosis) believes most emphatically in the beneficial results of tuberculin in tubercular disease and he has come to this conclusion as a result of his observations on some hundreds of cases. Some cases recorded by him show what he calls the amazing value of the treatment. He stated that tuberculin therapy has many failures to record, but his own belief is that given an early case of any form of tuberculosis, and proper tuberculin treatment, the percentage of good results obtained will compare favorably with those obtained by any form of treatment in any disease. So far his personal experience is confined largely to the use of tuberculin T. R. Tuberculin therapy is not easy, for great harm results from injudicious dosage or spacing of the doses. The author is content to be guided by a consideration of the temperature and the clinical symptoms. The great point is not to be in a hurry. He commences with infinitesimal doses, and then proceeds more cautiously still. He usually gives the dose by the mouth on an empty stomach before breakfast, and he has proof of the efficacy of this method. It is the more convenient in hospital and general practice and in the case of children. In some cases, such as those of lupus, he prefers the hypodermic method of administration.

Cystoscopy of the Serous Cavities.—Jacobeus (The Hospital, London) has conceived the idea of making a direct inspection of the peritoneal and pleural cavities by means of a cystoscope. He uses a trocar and canula, and a cystoscope of Nitze which is sufficiently small to pass within it. The Dr. first makes a small incision in the skin and passes in the trocar, empties the cavity of fluid, and insufflates air by means of a Politzer air-pump. He then introduces the cystoscope, which is fitted with a valve to prevent the air escaping. The maneuvre is easier in the case of the pleura than of the peritoneum, on account of the danger of injury to the viscera, but experiments on the cadaver have shown that the introduction of the trocar does not involve the risk of injury to the intestines, even when there is no ascites. The author has been able by this means to observe the presence of hepatic cancerous nodules, of perihepatitis, peritoneal congestion, cancerous nodules of the intestine, and to study intestinal peristalsis. In the case of the pleura he has not been able to detect definite lesions, but hopes to succeed in doing so with more dexterity. He is of opinion that "laparoscopy" and "thoracoscopy" should furnish useful data, comparable in some degree with those of exploratory laparatomy. Considering, however, the somewhat complicated and difficult technic and manipulation, and the very limited range of observation obtainable even in the most favorable circumstances, it may be doubted whether the method offers any but a very limited field of usefulness.

Inherited Syphilis from the Ophthalmological Standpoint.—Bull (Med. Rec.) states that the cases of prenatal, intrauterine ocular syphilis, especially of the deeper tissues of the eye, are far more frequent than is usually supposed, and the intrauterine infection runs its destructive course much more rapidly than where the ocular infection develops after birth. It is a mistake to suppose that congenital syphilitic lesions of the eye run a mild course, for while some of these syphilitic infants are still-born or die in early infancy, many of the so-called bad cases live through infancy and childhood, but with very extensive ocular and aural stigmata. The ocular lesions may be confined to the lids and conjunctiva or cornea, or they may involve any or all of the deeper structures of the eye. In very young infants, lesions of the uveal tract are more frequent than keratitis as evidence of congenital syphilis. Iritis at birth is not a very uncommon lesion, usually choroiditis of one or both eyes, which is always associated with the stigmata of defective nutrition and the signs of facial senility. The symptoms are often so slight as to escape casual observation, and this is especially true of the ciliary infection and the free exudation into the field of the pupil. In very young infants interstitial keratitis is very rare. When the disease occurs later in child life, the retina suffers but slightly. The writer has been particularly impressed by the extremely good visual acuity after an extensive choroiditis. This disproportion between the ophthalmoscopic findings and the actual visual acuity in the chorioiditis of childhood does not exist in the cases

of retinitis and optic neuritis. The coincidence of interstitial keratitis and a vertically oval cornea is not infrequently observed in one or both eyes. This malformation of the cornea, however, like other stigmata of inherited syphilis, should not, when considered alone, be regarded as absolute proof of the disease. The ears may show scars or persisting perforation of the membrana sympani, or more or less complete destruction of the ossicula. A form of aural trouble without appreciable lesion, undoubtedly due to inherited syphilis, is characterized by great suddenness of invasion and rapid course ending in absolute deafness in a few days or hours, and resisting permanently all treatment. Other syphilitic stigmata are frontal prominences, flattening and broadening of the bridge of the nose at its base, microdontism, in which some of the teeth are very small, and persistence of the first teeth far beyond the usual period. Where only one stigma exists the occurrence of stigmata in other members of the family is confirmatory. It is a paramount necessity to recognize the stigmata at the very earliest age, if we are to do anything for the restoration of useful vision. The writer advocates sterilization of persons who have presented undoubted evidences of constitutional syphilis in order to save the innocent and to prevent the degeneracy of the race.

Diagnosis of Abortive Whooping-cough by Means of the Reaction of Bordet-Gengou.—Delcourt (Arch. de med. des enf.) states that the discovery by Bordet and Gengou of a small cocco bacillus in the expectoration of children having whooping-cough has revolutionized the diagnosis of this disease. We do not now have to wait for the appearance of the whoop before isolating the child from other children. This microbe is found in pure culture in the exudation of the bronchial tubes, which is rich in leukocytes, and of white color. They are much more frequent at the beginning of the disease than after the phagocytes have acted on them. When the infection has become mixed they are much harder to find. The microorganism is ovoid, sometimes elongated, sometimes short and resembling a micrococcus. It can be stained with Kuhne's blue, and toluidine blue, the outside and the extremities being of a deeper color than the rest of the cell. This microbe has been cultivated by its discoverers in a medium prepared by themselves. The colonies found on the third day are white, circumscribed, and projecting. Its identification becomes more difficult as the disease advances. When complicated with bronchitis, bronchopneumonia or influenza it is impossible to find the specific microorganisms, but its presence may be proven by the fixation of the alexin. Gengou and Bordet have demonstrated in the serum of adults who had pertussis the presence of an antipertussis sensibilitizer which demonstrates the true nature of the disease. In the adult and in many children the whoop and the cry are absent. Yet these persons have an abortive form of the disease, as may be shown by this test. All children who, during an epidemic, show obstinate cough and vomiting should be submitted to this test. The abortive cases are more frequent than the classical ones, and it is due to their contagion that the mysterious spread of the disease has occurred. In an epidemic localized to one village tests were made which proved these facts. A systematic search with this reaction proved the diagnosis. Children who are carriers of the microorganism remained in the schools and spread the disease; a teacher who had an obstinate cough but no whoop carried it from school to school where she taught singing. The author concludes that pertussis of the abortive type is frequent among both children and adults; prevention will seek out these cases; the symptoms may be very slight; the diagnosis can be made only by the Bordet-Gengou test; the fixation reaction is of value in differential diagnosis.

Thyroid Grafting and the Surgical Treatment of Exophthalmic Goitre.—Groves and Joll (British Medical Journal) say that the indications in the case of exophthalmic goitre are to lessen the thyroid secretion, to counteract the thyroid toxicity, and to add some source of normal secretion; that in cretinism and myxedema the thyroid therapy has recently been supplemented or replaced by thyroid grafting. They report a case, the features of special interest of which are as follows:

The temporary improvement following partial thyroidectomy, which lasted only as long as the wound discharged. The occurrence of tetany after subtotal thyroidectomy in which the parathyroids had apparently been preserved. The cure of this tetany by thyroid medication. The persistence of dyspnea and tachycardia in spite of subtotal thyroidectomy. The occurrence of tetany of a functional type after thyroid grafting. The cure of this form of tetany by hypnotic suggestion. The great amelioration of the symptoms by thyroid grafting. The occurrence of menstruation and coincident swelling of the grafts after thyroid transplantation.

It is obvious from a consideration of their case, together with a review of the literature of the subject, that the value of thy-

roid grafting is by no means settled, but enough has been said to encourage further work in this direction. It seems fairly certain that grafting can be successfully undertaken as far as the immediate vitality of the grafts is concerned. Further, that in recent cases of thyroid inadequacy, a good functional result will accrue from this method.

A study of literature shows that heteroplastic transplantations are futile. Experimental work has established the fact that thyroid grafts in animals "take" and that they functionate. The healthy tissue of the lobe removed for cure of a localized adenoma will answer well. It has been observed that the grafts take better in thyroidectomized animals than in those not so treated.

Cristiana advises the use of thyroid tissue the size of a wheat grain, each piece being placed by separate stab wound in the subcutaneous tissue of the neck and shoulder regions. Absolute asepsis is essential. No antiseptics should touch the wound or the graft, and rapidity of execution is also of prime importance. The best results were obtained when the grafts were kept warm in a strictly isotonic solution, preferably Locke's or Ringer's; isotonic salt solution is far less satisfactory. Grafts can be kept in human blood serum for an hour. An interesting case is reported of myxedema following thyroidectomy for Graves's disease held in check by the mouth exhibition of doses of thyroid equal to 1½ grammes. On two occasions at three months' interval 38 pieces of thyroid tissue were grafted into the subcutaneous tissue. Symptoms of thyroidism followed, but soon the dose of thyroid by mouth could very materially be diminished. This woman subsequently became pregnant, and during pregnancy there was an increase in the size of the grafts, followed by recession after delivery.

Carraro has obtained results by implanting thin disks of thyroid tissue in the subcutaneous tissue, and insists that one side of the transplanted piece must still be covered with some of the connective tissue capsule of the gland to insure its vitality.

Bircher on the basis of the clinical experience is entirely skeptical as to the beneficial effect of grafts.

Left-handed School Children.—Schæfer (Berliner Klin. Wochenschrift) has compiled a statistical series, from observations on 18,000 children in the Berlin schools, on the basis of a carefully worded circular inquiry, with a strict definition of the term "left-handed." The following results were obtained: Among 17,074 children, there were 692 left-handed individuals—4.06 per cent. (boys, 5.15 per cent; girls, 2.98 per cent.). There were apparently not so many left-handed pupils in the upper as in the lower classes; but this is referable in part to the smaller number of children in the higher classes in general. Heredity could be demonstrated in 60.2 per cent. of all cases: from parents to children, in 16 per cent.; from grandparents to grandchildren, in 8.23 per cent.; in three successive generations, in 2.45 per cent., and in other relatives, in 33.52 per cent. of the cases.

Among the symptoms commonly ascribed to left-handed individuals the author investigated the posture during sleep, finding that the position on the left outnumbered that on the right side by 5.5 per cent., whereas in right-handed individuals the position on the right prevailed by 22.1 per cent. Disturbances of sleep were found to be three times as common as in the right-handed.

Writing with the left hand was mirror-writing in 42 per cent. of the left-handed children, as compared to only 12.3 per cent. mirror-writing in the same number of right-handed individuals. Differences in the width of the pupil were rare.

According to the author's figures, the Berlin public schools contain 9265 left-handed children—enough to fill over twelve schools. This large number of children are being educated against their natural disposition, to their disadvantage, as shown by the teachers' certificates as well as samples of writing, drawing, and manual work. The author points out that this disposition should receive consideration, and that the enforced use of the right hand should cease. The left hand, in left-handed individuals, must not be left idle, but should be alloted the same part in education which the right hand always has enjoyed in right-handed individuals. Left-handed people should write, draw, and do fancy work of all kinds with the left hand, just as the right handed use the right hand. These suggestions are entirely compatible with the routine work of schools. Concerning the theory of right or left-handedness, respectively, the author repudiates the theory of the centre of gravity, by quoting five cases of situs inversus, all of which were right-handed, contrary to expectations.

The customary cerebral theory is not accepted by the author, who endeavors to explain the preponderance of the left half of the brain in the right-handed, and the right half of the brain in the left-handed, as due to certain differences in the development of blood-vessels and the resulting different nutritional conditions in fetal life.

Heredity and Insanity.—Mott, in The British Medical Journal, ——— is these conclusions, viz.: 1. Hereditary predisposition is the most important factor in the production of insanity, imbecility, and epilepsy. It is the tendency to nervous and mental disease, generally speaking, which is inherited. This may be termed the neuropathic taint. 2. Education, sanitation, and the rest, as Bateson has stated, are only the giving or withholding of opportunity for good or ill. 3. Alcohol is a powerful co-efficient, but not of itself the main cause, in the production of insanity, except in the rather infrequent cases of alcoholic dementia. 4. Certain types of insanity may be transmitted with greater frequency than others. This has been termed similar heredity. The types are: Periodic insanity (also termed manic depressive), delusional insanity, and epilepsy. The general rule, however, is for a different type to appear. 5. Mothers transmit insanity and epilepsy with much greater frequency than do fathers, and the transmission is especially to the daughters. 6. Anticipation or antedating is the rule whereby the offspring suffers at a much earlier age than the parent; more than one half of the insane offspring of insane parents are congenital idiots or imbeciles, or have their first attack in the period of adolescence. This adolescent insanity may take an incurable form of dementia in a large number of cases; in others it is usually mania, melancholia, or periodic insanity, and not infrequently epilepsy with or without imbecility. Very rarely does the parent become insane before the offspring. This is a strong argument of hereditary transmission, possibly hereditary transmission of an acquired character. 7. Regression to the normal average may be (a) by marriage into sound stocks, or (b) by anticipation or antedating leading to congenital or adolescent mental disease terminating the perpetuation of the unsound elements of the stock. 8. High grade imbeciles who are not at present in any way checked in procreating owing to social conditions interfering with survival of the fittest, together with chronic drunkards, neurasthenics, and neuropaths, are continually reinforcing and providing freshly tainted stocks. 9. Recurrent insanity, owing to the fact that patients are not segregated for any length of time, is probably the most potent cause of insane inheritance. Facts tend to support the opinion that the recurrent types of insanity during lucid intervals may breed a stock of potential lunatics and paupers. 10. Nature is always striving to go back to the normal average and only relatively few of a stock are insane. A stock with a streak of insanity when combined with genius is not aad, and the same may be applied to a nation; but we only want a sreak of genius and insanity, the great body of the nation should be of good normal average, for I believe that nation will possess the greatest potential virility in the struggle for existence that can breed from the greatest number of men and women with good bodily health who possess a large measure of the three attributes of civic worth, viz., courage, honesty, and common sense, combined with parentage, pride of family, and pride of race.

Distomiasis or Sheep Rot.—Ward, in a recent issue of the British Medical Journal, mentions the symptoms of this disease in man. The period of invasion may pass unnoticed clinically, and in the early part the host may gain weight and enjoy a good appetite. There may, however, be slight jaundice and moderate enlargement of the liver. In sheep the minimum duration of this stage is six weeks; in man it is probably longer. Secondly, the stage of anæmia is recognized, and this is supposed to coincide with the maturity of the flukes. Anæmia of the mucous membranes is the most obvious sign, but the symptoms are rather those of toxæmia; in the case about to be considered they were certainly quite disproportionate to the anæmia. Appetite fails or may become depraved, the temperature is irregularly elevated, and the frequency of the pulse increased. Gastric pain and intestinal disorders become evident, diarrhœa and vomiting are not unusual, constipation may be present. The eyes are lustreless and the skin dry; experienced veterinary surgeons have been known to base a diagnosis on the condition of the skin alone. Slight exertion aggravates the dyspnœa which is present, and the third stage soon appears. This is the stage of emaciation and ascites, and is accompanied by increased anæmia and progressive hepatic derangement. Œdema of the eyelids, conjunctivitis, hydrothorax, bronchitis, ascites, and jaundice are among the common symptoms. The fourth stage seems to correspond in time with the emigration or excretion of the parasites, and in those who have survived the third is one of slow recovery from toxic symptoms. Fibrosis and other changes in the liver remain, and may cause permanent ill health. Abscess of the lung and general peritonitis are among the possible causes of disease. As to the management of the disease, treatment with anthelmintics is of no value, since they are not excreted in the bile and so cannot reach the parasites; moreover, any drug that was excreted in the bile in sufficient quantities

to kill the fluke would probably kill the host as well. As a matter of fact, we do not know of any drug which is secreted in the bile or circulates in the blood in sufficient concentration to act as a vermicide. Quinine is certainly a protoplasmic poison, and exists in the blood as such, and the same is true of arsenic; but these do not seem to have any effect on blood sucking parasites. We endeavor to stimulate the secretion of bile, with the idea that toxic substances should be washed out and their absorption perhaps prevented. For this purpose euonymin may be given three times a day in pills containing one grain. A marked rise in hæmoglobin will probably take place under this treatment, but this may be due to rest and improved hygiene. Symptomatic treatment follows the usual lines, and even surgical treatment may have to be invoked. Prophylactic treatment is hardly called for in man, but consists of the administration of common salt with any food likely to be affected.

The Medical Treatment of Cholelithiasis

Anderson, in the Australian Medical Journal, says that in view of the important part now generally assigned to infection by micro organisms in the formation and increase in size of gall stones, the most reasonable method of treatment of the condition would seem to be to endeavor, if possible. to render the gall bladder aseptic, and the drug that suggests itself as likely to be of service in this way is Urotropine or one of its derivatives.

The value of Urotropine in infective conditions of the urinary tract has long been recognized. Horton Smith long ago showed that typhoid bacilluria readily yields almost invariably to its use. Although Although Nicolaier, who was the first to recommend its use in urinary infections, did not think that it had any effect in acid cystitis due to the bacillus coli communis, it is now regarded as one of the most efficient agents in treating that infection. In the pyelitis of children, for example, which is found to be almost always associated with the presence of the colon bacillus, alone or in combination with other organisms, Urotropine is of the greatest service.

Crowe has shown that the action of this drug on the gall bladder and pancreas is similar to that on the urinary tract; it is excreted unchanged or as formaldehype by the bile. In a distended gall bladder infected with bacillus typhosus, 15 grs. given daily gave a steriie culture at the end of ten days. In another case a massive dose of 75 grains gave a sterile culture at the end of twenty-four hours.

Moynihan again has recorded a case of pancreatitis. in which the bacillus typhosus was found in the fluid from a fistula after drainage of the gall bladder. Fifteen grs. of Urotropine were given thrice daily, and eleven days afterwards no typhoid organisms could be found in the bile.

For over four years I have been using Urotropine in doses of from 7½ to 10 grs, three times daily in cases of gall-stone disease, and have records of twenty-four private cases thus treated. I am sorry to say that, through a misadventure, it has been impossible for me to obtain notes of hospital cases.

The diagnosis has been made upon the presence of severe intermittent or recurring pain in the hypochondriumt sometimes in the epigasstrium, sometimes witn, sometimes without jaundice, usually with pain in the right subscapular region, and tenderness in the posterior lower region, and at Naunyn's point, the outer edge of the right rectus muscle, opposite the tip of the ninth costal cartilage. In addition to Urotropine, I have administere], twice weekly, a pill of 1 gr. each of euonymiu and iridin; the latter is regarded by Rutherford as one of the most reliable of cholagogues.

Two of my patients—elderly ladies, aged seventy-eight and seventy respectively—have died of syncope and apoplexy two years aftet the commencement of treatment, and in each case there was no return of symptoms for the last eighteen months of symptoms for the last eighteen months of life. I know of several others who have been quite free from symptoms after a variable time from the beginning of treatment. Many of the cases have been lost sight of, and some of these I think I should have seen if symptoms had recurred.

Three of the number have undergone operations for their liver condition. In one case a lady of about forty, who had had repeated attacks of bitiary colic, was operated on thirteen days after the first administration of Urotropine. No definite stone was found in the gall bladder, but there was some gritty substance which suggested broken-down gall-stones.

The second patient was a young lady who had had enteric fever two years previously, and who had had recurrent jaundice with every little pain, the diagnosis being doubtful. Urotropine was given for three weeks without result, and five weeks later operation took place. No gall-stone was found, and the symptoms did not improve after cholecystotomy. Later, the patient went to her home in the country, developed ascites, and eventually died in a little more than twelve months from the date of operation.

The third case was a young lady whom

I saw temporarily sor a colleague during his absence from town. She was put on Urotropine, but I cannot say for how long it was continued. Six weeks later she was operated on, and a large single ealculus removed from the gall-bladder, After a prolonged illness she quite recovered.

One case was a feeble; elderly gentleman of over seventy, who had recurrent attacks of pain in the right hypochondrium for some weeks, with jaundice. When I saw him in consultation he was very ill, with fever up to 101°, a distinct right hypochondriac swelliug, and a leucocyte count of 1o,000. Operation was advised and declined, and on my visiting him a second time a fortnight laler there was not much alteration in symptoms. The Urotropine was given in the usual doses, and a fortnight later he was said to be rid of his pain and jaundice, and to be getting about again.

I think there can be no doubt that, in addition to its disinfectant actiou on the urinary bladder in cases of enteric fever, Urotropine is likely to be of use in preventing infection in the gall-bladder, and so minimizing the danger of cholelithiasis after that disease; and it is well, therefore, to giue Urotropine as a routine treatment during convalescence from typhoid.

My experience inclines me to recommend tbe nse of Urotropinei together with the other dietetic and hygenic measu,es already mentioned. in early cases of cholelithiasis, or in cases where the indications for operation are not urgent. If operation has to follow, the antiseptic action of the drug on the bile may be helpful in preventing septic complication. We know, however, that in urinary sepis Urotropine cannot always be regarded as a specific, and it is not likely to be so in gall-bladder conditions. Even if we are able to produce a sterile condition of the gall-bladder contents, there may be many conditions which call for operative interference, and the solution of a calculus may be too slow to admit of operative delay.

In conclusion, it is well for the physician to bear in mind the words of Mayo Robson:—"I hope the time is not far distant when it will be fully recognized that though cholelithiasis, so far as its cavses and its early treatment are concerned, is distinctly a condition for medical treatment, it is both unjust to the patient and unfair to the profession to continue medical treatment and to postpone surgical aid until serious complications supervene or the patient is almost, if not quite, past relief."

Sexual Education by the Family, by Science, by Mortality, and by Hygiene. —Doleris (La Gyn.) says that sexual education will lead young people toward a higher goal, show them early the true significance of life, guide them to a sufficient knowledge of human biology, and inculcate a logical conception of the laws of nature which rule our lives. It is time to put an end to the ignorance, and mystery of sexual matters, derived from religious dogmas, which has been thrown around the highest and most essential function of life, reproduction. The austere morality of religion has accomplished little. There is no desire to lessen the dominance of true love in marriage by education, but to give a true appreciation of the physical and psychical qualities necessary to produce healthy and strong offspring; to substitute this for an idealized romantic sentiment, or a materialistic satisfaction of the sensual element. We must break with a system of education whose worst consequence is to give a false judgment to children, to pervert their imagination, and sometimes even to incite them to vice. The education of the child should begin when he asks the first questions about the differences between the sexes, and the phenomena of generation. It must begin with the parents, but they must first receive instructions which shall enable them to teach the child aright, and make the knowledge correct and natural. To begin the sexual education at sixteen years of age is too late. Science alone is competent to begin this instruction; teachers must first be taught. For girls, women physicians who are also mothers make the best teachers. Girls are more precocious and more curious than boys in their thoughts about motherhood. They are more apt to ask questions and will not be satisfied with foolish answers. There is no such thing as a natural chastity; the self-control of the young girl is the product of moral heredity and early education in prudence. Educators must receive scientific instruction in sexual matters to fit them for their instruction of children. The program should include natural sciences, morality, hygiene, and pathology. The subject of reproduction must become to the child natural, simple, and moral. Ideas derived from zoology, biology, and botany will aid him in comprehending process. The occurrences of sexual life in flowers, chickens and the domestic animals should be taught him in a refined manner. They make it possible for him to comprehend what happens in the human race. As every flower requires fertilization, the idea will become usual to him that the same process is necessary for the human race.

The gradual transition of ideas will not shock or offend, but rather interest his mind. With the coming of puberty he must be taught by lessons in physiology and anatomy, to control his sexual instincts. The young girl must be taught how to chose a husband, what are the conditions of a healthy and happy marriage, the nature of gestation, and parturition, and the nourishment and physical education of the child. It must be taught that the function of the genital organs must always have an object, procreation, and that they are to be used in no other way. As control is taught the child for hunger, thirst, pain, so control of the sexual instinct is to be taught. The assistance of exercise, manual labor, games, and sports in gaining this control must be learned. Abstinence from alcohol, moderation in the sexual life, unstimulating diet must all be shown to be of benefit. Continence must be inculcated in the young up to a certain age. They must be taught that science and natural laws justify this continence, and that indulgence is not necessary to health. Suitable books should be given to the young on these subjects; the authority of the physician should be exercised; conferences with his teachers, in schools for adults, in professional schools, in the army, etc., may all aid in this work. Such an education will ennoble love and the life of the family, it will render it more and more happy.

Relations of Biliary Lithiasis to Pregnancy and Labor.—Audebert and Gilles (Ann. de gyn. et d'Obst.) discuss the relations of pregnancy and labor to the production of gallstones and the proper treatment of these conditions. Of the causative relation between the pressure of the uterus, the changes in metabolism of the pregnant state, and the production of biliary lithiasis there seems to be no doubt. There is a defect of the bile circulation from the pressure of the uterus, and the nutritive troubles incident to the presence of the fetus, resulting in an acid reaction, tend to cause precipitation of the bile salts. The presence of bacteria assists in the occurrence of infections of the bile passages. The first prominent symptoms are due to the migration of the stones: colic, vomiting, and icterus. In other cases an empyema of the gall-bladder occurs with symptoms of septicemia. Prophylactic treatment will address itself to prevention of infection by the bacillus coli. Stagnation of the contents of the bowels should be prevented by cholagogue cathartics, and a diet that will avoid fermentation. Washing out the bowels and stomach is of value. Palliative measures in cases of colic include hot applications and sedatives. Obstetrical treatment will seldom be called for. Operation can, in most cases, be delayed until after delivery. In only the most serious cases should operation be undertaken during pregnancy. Then cholecystotomy is usually sufficient. After labor has taken place operation may be done, preferably cholecystotomy.

Conjugal and Family Tabes and General Paralysis.—Beaussart (Journal de Neurologie) writes in regard to the recorded cases of the above conditions, and adds some cases of his own. Of course there is often difficulty in determining definitely the syphilitic history. For this reason, probably, the author does not give definite figures showing the absolute number of recorded cases. He gives, however, several pages devoted to writers' names, with a few details of the cases which they have published. Looking over these pages one can say that it is practically certain that one could fairly easily collect from the literature 100 cases where the husband and wife both affected with syphilis later became either general paralytics or tabetics. He supplies some specially interesting cases. A glass-blower, who contracted syphilis by using the mouthpiece belonging to another syphilitic blower, became a general paralytic. His wife also became paralytic. The other blower became a general paralytic, whilst his wife shows no abnormality, but her lover is affected with tabes. The next case was a general paralytic, giving a positive Wassermann reaction. His wife is a taboparetic. Her lover, contaminated by her, is also a general paralytic, and his wife shows signs of syphilitic affection of the nervous system. Another observation concerns two general paralytic brothers, syphilized by the same mistress; another mistress of one of them died of general paralysis; and a lover of the first mistress is also a general paralytic. Another case concerns two general paralytics, one of whom is dead. His wife became the mistress of the second. A case of the author concerns a man of 46, who contracted syphilis at 27. His first wife died of general paralysis; the man is now a general paralytic and his second wife has tabes. The Dr. shows that in some cases of general paralysis where syphilis has been denied and which were ascribed to other causes such as lead poisoning, a positive Wassermann reaction has been obtained. The writer refers to the idea that there is a form of syphilis having a special virulence for the nervous system. In this connection he refers to the observation of Bezancon and Labbe that a staphylococcus obtained from an infected joint is very liable when injected into animals to cause joint trouble in them; its growth in

the joint has given it a special joint virulence. He suspects the possibility that a spirochæte derived from an individual whose nervous system has been affected by it has acquired a special virulence for nervous tissues. The writer concludes that syphilis is almost exclusively the etiological factor in these cases, and recommends that in cases in which other factors and not syphilis appear to be the cause that a Wassermann test should be made.

Thickened Pleura and Persistent Pleuritic Effusions.—Dieulafoy (La Presse Medical) mentions some cases of this nature and discusses the problem of treatment. The first case was that of a young woman who in the space of two months required paracentesis thoracis 15 times, the total amount of fluid withdrawn amounting to 40 litres. The pleurisy terminated in a cure, but its nature was proved by the subsequent development of pulmonary tuberculosis. The second case was that of a man aged 35, of previous good health, who developed pleurisy with effusion. Subsequently at regular intervals over a period of years he required the withdrawal of fluid from the chest, there being no other evidence of disease. The pleura was evidently much thickened, but still there was a remarkable freedom from symptoms other than those due to the mechanical pressure of the fluid, even though at times during its later stages such fluid has been hæmorrhagic or purulent and fœtid. Microscopic examination of the fluid showed the presence of granular leucocytes, endothelial cells, streptococci and pneumococci. The micro-organisms, however, on cultivation were found to be very attenuated in virulence. The third case, that of a man 59 years of age, was of a very similar nature. For 18 years thoraco-centesis was performed at intervals without incident. Then the fluid became sanguinolent with a large proportion of lymphocytes. The pleura was much thickened, but the existence of the condition seemed to have very little effect on the general health of the patient. There was no sign of pulmonary tuberculosis, and the fluid in this case was proved to be sterile: the nature of the thickening was therefore not explained. As regards treatment, Dieulafoy refers to a method of decortication of the lung practiced by M. Delorme. Before such an operation is undertaken it is, of course, necessary to endeavor to ascertain beforehand the expansibility of the lung, as well as the thickness and resistance of the enveloping pleura, by means of radioscopy and radiography. But in view of the maintenance of good general health, the complete though temporary relief obtained by withdrawal of the fluid, and the danger and risk of failure involved in such an operation, one would naturally reflect seriously before suggesting or undertaking it.

Uterine Malformations.—Rochard (Bull. Gen. de Ther.) says that the diagnosis of malformation of the uterus is generally impossible before operative procedures are undertaken to relieve the symptoms occasioned by the development by pregnancy. The diagnosis of extrauterine pregnancy, or rubal pregnancy about to rupture is the one generally made. When a laparotomy reveals the existence of a uterus with two fundi with two products of conception present it becomes a question whether the organ should be removed, or whether the pregnancy should be allowed to continue after the closure of the abdomen. If there is a condition characterized by inflammation and which would be likely to produce abortion it becomes our duty to remove the uterus in the interest of the patient, who is liable to lose her life in any succeeding pregnancy, if not in the one existing. If one or more successful pregnancies have already been gone through the uterus should be allowed to remain. When there is a probability of successive abortions it should be removed. The Dr. has observed a case of this kind, in which there was no external indication of abnormality, but in which crampy pains, nausea, swelling of the abdomen, and syncope caused a diagnosis of ruptured tubal pregnancy to be made. Operation revealed a uterus bicornus—bipartus, with a pregnancy of about the same date in each fundus. There was a complete separation of the two fundi, with a sort of ligament between the two. One uterus was ready for abortion, the other being still normal. Here the uterus was removed, one ovary being left in place.

Epidural Injections for Backache.—Albrecht (Zent. f. Gyn.) says that backache is a symptom that results from all sorts of conditions. It may be of peripheral or central origin; it is associated with pyelitis, chronic constipation, sigmoiditis, gastroptosis and enteroptosis, due to the pelvic congestion that is produced by them. Hyperesthesia and hyperalgesia of the spinal nerves cause neuralgic pains. The author divides these manifestations of pain into two categories, functional neuroses, reflex from some other organ, and neuralgias due to general conditions like anemia and chlorosis. These symptoms are amenable to treatment by means of epidural injection of physiological salt solution, but not if caused by major gynecological troubles. Of the cases treated in this way

there were sixteen of severe functional neuroses, nine of which were cured by the first injection, one after three injections; four cases were improved, and two had no result. There were six cases of infantile uterus; in four recovery from pain was immediate, in one relief was temporary, and one had no result. There were seven cases of enteroptosis. After other means had been used to relieve the prolapsus six were relieved of the backache by injections of salt solution. Of cases of retroflexed uterus with pain after fixation, pain remained in seven and in three cases was relieved by injections; three were not benefited. Of thirteen cases of old inflammatory lesions of the adnexa, eleven were relieved by injection. In two cases of backache after extirpation of the uterus relief was given. In seven cases of enuresis there was prompt relief in two. The report includes fifty-three cases of backache with 72 per cent. of cures; 25 per cent. of negative results. Relief is not obtained in major genital diseases, but is marked in neuroses and neuralgias.

Diseases of the Breast.—Madison (Med. Press) states that the majority of breast tumors in women under thirty years of age are simple. The majority of breast tumors following shortly after parturition or abortion are due to septic inflammation. The majority of breast tumors in women over forty are malignant. Tumors of the breast are stronger predisposing causes of cancer than tumors elsewhere, because of the early senile changes which occur in that organ. Pain supervening early in the history of a breast tumor suggests a simple rather than a malignant growth. Puckering of the skin is the most important sign of malignancy in a breast tumor. Multiplicity of growths is a feature in favor of benignancy. A bloody discharge from the nipple, associated with a tumor, suggests a papillomatous cyst. Primary cysts rarely, if ever, occur. Cysts are secondary to other changes in the breast. Considering the frequency with which malignant changes occur in the breast, and the importance of an early diagnosis when most difficult to make, every tumor should be removed and examined. All solid, apparently simple tumors which do not shell readily out of an obvious capsule demand excision of the breast and pectoral fascia.

Sacral Anesthesia in Gynecology and Obstetrics.—Schlimwert and Schneider (Munch. med. Woch.) have made use of this method of anesthesia in 155 obstetrical and gynecological cases. As a result of their experience they recommend its use in the simpler operations of labor and gynecology. The technic is somewhat difficult in fat persons, and in these it is better not to attempt it. The use of this method has not been attended, in the experience of the authors, with any inconveniences. It is recommended in prolapsus operations, repair of the perineum, hemorrhoids, and other operations on the external genitals. In obstetrics it may be used in operations on organs supplied by the sacral plexus, such as forceps, perineum repair, etc. It is advised, combined with scopolamin-morphin sleep in sensitive patients who wish to feel no pain throughout labor. With a sitting position and the use of a 2 per cent. solution the anesthesia lasts about twenty minutes. With a 1 per cent. solution and elevated pelvis anesthesia comes on in from five to fifteen minutes and lasts about one hour; with a 2 per cent. solution its duration is two hours; anesthesia begins in the buttocks and extends forward and backward into the labia and mons veneris. With elevated pelvis it reaches to the navel. In labor the pain of the contractions is removed for about an hour and a quarter, but after that time it returns and either another injection must be given or another anesthetic employed to prevent remembrance of the pain.

Miscellaneous.

Medical Examining Board of the State of Florida, Tallahassee, Florida, May 8th and 9th, 1911.

Questions Asked.

ANATOMY.

1. Through what tissues would you cut in making a transverse section through the middle of the femoral region?
2. Trace the blood from the heart to the index finger.
3. Describe the palmar arches.
4. Give the location and relations of the popliteal artery at the knee joint.
5. Give the origin in the brain of the pneumogastric nerve and trace its course to the body.
6. Name the abdominal viscera that come in contact with the diaphragm.
7. Describe the elbow joint.
8. Describe the thyroid glands, giving exact location and blood and nerve supply.
9. What is the difference in the general characteristics of a cervical and a dorsal vertebra?
10. Describe the antrum of Highmore.

PHYSIOLOGY.

1. What is the chemical reaction of the

blood, and what are some of the bodily conditions which lessen this reaction?

2. Name the most important function of the red blood corpuscles.

3. Give the cause of the circulation of the blood, and normal rate of pulse.

4. What relation has the pneumogastric nerve to the heart beat?

5. What is the function of the capillaries?

6. Give the normal relation of respiration to the heart beat.

7. What part does the gastric juice play in digestion of food, and what is the effect of strong alcoholics upon the gastric juice?

8. How does the digested food enter the circulation?

9. Give normal temperature of the body (axilla) and name some conditions producing variations in same.

10. Give specific gravity of urine, variations within limit of health and causes for same.

SURGERY.

1. Define the following: sterile, deodorant, disinfectant, antisepsis, asepsis.

2. What is meant by infection, and mention its chief sources?

3. Differentiate fracture near a joint from dislocation.

4. Give etiology, symptoms and treatment of downward dislocation of shoulder-joint.

5. Give treatment of compound fracture of tibia.

6. Diagnose Empyema and give treatment for the same.

7. Diagnose appendicitis.

8. What conditions call for gastro-enterostomy?

9. Give etiology, symptoms and treatment of Mastoiditis.

10. What are the methods of reduction in strangulated hernia?

GYNÆCOLOGY.

1. Differentiate between anteversion and retroversion of the uterus.

2. Differential diagnosis between appendicitis and salpingitis.

3. Give causes and treatment of uterine hemorrhage.

4. Describe stenosis of cervix and give treatment.

5. Describe pudendal hernia; name varieties and contents.

6. Differentiate between ovarian cyst and ascites.

7. What is the difference between trachelotomy and trachelorrhaphy?

8. Under what conditions would you advise complete removal of the mammary gland?

9. What is Cæsarian section? Give indications for its use,

10. Define sub-involution of the uterus and indicate what pathological conditions are co-existent in the pelvic organs.

MATERIA MEDICA—THERAPEUTICS.

1. Name and describe the various methods of introducing medicine into the circulation.

2. What is the ordinary relative strength of a tincture to a fluid extract of the same drug?

3. Name some of the digestive ferments. Give their physiological action and therapeutical uses.

4. On what chemical change in the intestinal tract does the action of castor oil depend?

5. How is the action or opium modified by (a) age—(b) sex—(c) idiosyncrasy and (d) habit.

6. What are antipyretics? Describe their general uses and state how they are administered.

7. For what purpose would you give diuretics? Name and give dose of the ones that you most use.

8. Name three vegetable emmenagogues, and give the dose of each.

9. Outline your treatment of a case of coal-gas poisoning.

10. What are vasomotor depressants? Give an example.

OBSTETRICS.

1. At what earliest periods can pregnancy be possibly determined? Give methods of determination?

2. What is the latest theory as to the probable cause of eclampsia?

3. What are the premonitory symptoms of eclampsia?

4. Give treatment of hour glass contraction.

5. Give treatment for post partum eclampsia.

6. What is placenta praevia—varieties and treatment?

7. Give mechanism of the L. O. A. position.

8. What is Crede's method of prophylaxis for ophthalma neonatorum?

9. What are the indications and contra-indications for the use of forceps?

10. Outline treatment of post-partum hemorrhage.

CHEMISTRY.

1. Define the terms nascent state, neutral substances, valence, atomic weight and molecule.

2. What two elements are liquid at normal temperature, and what five are gases?

3. What are the physical properties of hydrochloric acid, and how obtained?

4. What are the antidotes for antimony poisoning?

THE PROSPECTIVE-MOTHER

CHILDBIRTH is always attended by more or less danger and discomfort. Too often the extra burden a prospective mother has to bear overtaxes her nutrition and strength. Effective tonic treatment is needed and clinical experience has clearly shown that no remedy is so serviceable from every standpoint as

Gray's Glycerine Tonic Comp.

Used throughout the later months of pregnancy and during the puerperium, it gives to the mother the exact stimulus and support needed, not only to carry her through a trying period but to fit her for the still more exacting one of lactation.

Free from contraindication, it is the one remedy that the practitioner can employ before and after parturition with absolute certainty that its effects will be beneficial—never harmful.

THE PURDUE FREDERICK CO.
298 BROADWAY, NEW YORK

LISTERINE

Listerine is an efficient, non-toxic antiseptic of accurately determined and uniform antiseptic power, prepared in a form convenient for immediate use.

Composed of volatile and non-volatile substances, Listerine is a balsamic antiseptic, refreshing in its application, lasting in its effect.

Listerine is particularly useful in the treatment of abnormal conditions of the mucosa, and admirably suited for a wash, gargle or douche in catarrhal conditions of the nose and throat.

In proper dilution, Listerine may be freely and continuously used without prejudicial effect, either by injection or spray, in all the natural cavities of the body.

Administered internally, Listerine is promptly effective in arresting the excessive fermentation of the contents of the stomach.

In the treatment of summer complaints of infants and children, Listerine is extensively prescribed in doses of 10 drops to a teaspoonful.

In febrile conditions, nothing is comparable to Listerine as a mouth wash; two or three drachms to four ounces of water.

"The Inhibitory Action of Listerine" (128 pages) may be had upon application to the manufacturers.

LAMBERT PHARMACAL COMPANY,
Locust and Twenty-first Streets, ST. LOUIS, MISSOURI

5. Give chemical formula for nitrate of silver, and how prepared.

6. What are the symptoms of poisoning by illuminating gas, and how are such cases treated?

7. What is the percentage of alcohol in wines, beer, gin, whiskey and brandy?

8. From what source is saccharine derived, and what are some of its uses?

9. What four elements are called halogens?

10, Give maximum and minimum specific gravity of normal urine, and describe tests for albumin and sugar.

The Value of the Uterine Sound in the Diagnosis of Cancer of the Capus Uteri.

Violet says that the early diagnosis of cancer of the body of the uterus cannot be obtained from the ordinary symptoms of irregular hemorrhage, serosanguinolent discharge, watery leucorrhea, etc., early enough to get the best operative results. But valuable information may be obtained by the use of the uterine sound, if it be introduced without any violence and gently moved over the surface of the uterine mucosa The oprrator feels that the enlarged end of the sound scrapes over a roughened surface that feels quite different from the normal mucosa or from placental debris, and at the same time a rasping sound may be heard as the end drags over the edge of an ulceration. In general a gentle application of the uterine sound will cause but little bleeding, but if a marked bleeding that lasts some time results, it is presumptive evidence of cancerous tissue, which is friable and bleeds easily.—Lyon Medical.

The Specific Agent of Ozena.

Barabaschi has made a study of the specific cause of ozena. He found in pure culture a coccobacillus similar to the pneumobacillus of Friedlander. The growths were easily stained with all aniline colors, and not decolorized by Gram stain. The organism is endowed with protoplasmic movement, but has no cllia. Intraperitoneal inoculation caused septicemia and peritonitis. The cultures had always the extremely fetid odor that is noticeable in ozena. This organism develops much like the pneumonia bacillus, but its action on milk is different, which it does not coagulate while the bacillus of Friedlander does coagulate it rapidly.—Giornale Internazionale delle Scienze Mediche.

The Lungs in Cardiopathies of Children.

Hutinel says that the pulmonary symptoms to be observed accompanying cardiac disease in children differ markedly from those of the adult. If we get edema it varies, in location and appearance, from the adult; if there is congestion it is not located as in the adult. One will get very loud murmurs in the child but rarely arrhythmic. In spite of the gravity of the heart symptoms the lung is generally immune. There is rarely edema of the lungs or serosanguineous expectoration. Hydrothorax from blood stasis is infrequent. Rales are less marked. The difference of affections often leads to errors of diagnosis. The signs may appear to indicate pleurisy, broncho pneumonia, or tuberculosis when neither of these is present. The lymphatics of the pleura and pericardium are largely connected, and affections of one serous membrane are easily propagated from the other. The thorax of the child is small in proportion to that of the adult, and when the heart is enlarged it presses on the middle portion of the lungs, which causes it to become compressed, the circulation to be interfered with, and atalectasis to occur. This condition simulates the dulness and bronchial breathing of tuberculosis,—La Presse Medicale.

Salvarsan.

Among the host of papers dealing favorably and adversely with this much-exploited remedy, a very interesting one of the former class is that contributed to the Journal of the Royal Army Medical Corps by Major Gibbard, Captain Harrison, and Lieutenant Cane. It is important to notice that these authorities have entirely abandoned the subcutaneous method of administration, on account of the not very infrequent rise of sloughing afterwards, sometimes at considerable intervals of time. Thus, in one case where the tissues at the site of inoculation sloughed four and a half months after injection, arsenic was found in considerable quantity by chemical analysis in the sloughs. The intravenous method has the sanction of Professor Ehrlich, and in the great majority of cases no after-results of an unpleasant sort are evident; in a very few cases some nausea and vomiting occurred. When thus used, the authors conclude that salvarsan has a marked and rapid effect on the various manifestations of syphilis. This effect is distinctly more rapid than that following the administration of mercury, and is often very pronounced when the latter drug has failed to produce any impression on the disease. Various observations indicate, they believe, that the clinical effects are due to a specific action of the drug on the parasites, and therefore that treatment by salvarsan is not merely symptomatic. Whether this action consists in destruction of the parasites or is

Fellows_Syrupus Hypophosphitum.

Maxima cum cura commixtus semperque idem.

Compositio prima ante alias omnis.

Reject < Worthless Substitutes. Preparations "Just as Good."

simply a temporary suppression of their activity they are not prepared to say. In view of these conclusions, they feel justified in pronouncing that salvarsan is a valuable remedy in the treatment of syphilis, and that adverse criticism on the score of relapses will be unjustifiable until the best method of administering it has been discovered.—Hospital Record, London.

A Peculiar Form of Reaction of the Uterine Mucosa as a Result of Artificial Placentation of Loeb.

Gasbarrini has repeated the experiments of Loeb, in which by incisions into the uterine mucosa, at the uterine horns, an artificial decidua was caused to form, which had no connection with the contact of the ovum with the mucosa, and occurred without the necessity of fecundation. These experiments were made on rabbits and guinea pigs. Incisions were made two to nine days after ovulation. Ligation of the tubes did not prevent the reaction, but extirpation of the ovary before the experiment did prevent it. In the author's experiments the incisions were effective only after ovulation, and the reaction occurred ten days after the operation, either at the site of the incisions or at another point nearby. When incisions were not made before the period of ovulation no reaction appeared. The author concludes that the placental reaction is caused by some active principle secreted by the ovary, which acts as a stimulant combined with the incisions.—Annali di Ostetricia e Ginecologia.

Dyspepsia.

"While many of the causes of indigestion may be traceable to faulty secretion of gastric and intestinal fluids as well as general lack of tone in the muscular structure of the tract, still the great proportion of these cases comes from eating too fast. Even under the most favorable conditions, with the best of teeth, rapid mastication cannot properly divide and break up the food particles and bring about the necessary admixture of salivary secretion. Hand in hand with hurried feeding comes overfeeding, and these two evils soon bring about pathological conditions which inhibit or prevent normal processes of digestion and assimilation. Lumps of food taken into the stomach which cannot properly prepare them for the digestive processes of the intestine, act as mechanical irritants to the sensitive gastric membrane, while decomposition and accompanying fermentation tends to further congest the lining membrane and its glandular bodies. Restoration of the defective secretion is our first consideration, and to this end the treatment is directed toward active depletion of the congested membrane by antiseptic measures which encourage exosmosis, thus increasing capillary circulation and gland activity and at the same time guard against hyperacidity. This course combined with thorough mastication of food and regularity of meals will bring about a speedy relief in a manner that cannot be accomplished by artificial digestants. Self-made dyspeptics are cured by this common sense treatment and can eat anything they may choose. Prepare the stomach for the reception of the meal in the following manner: One hour before meals take Glyco-Thymoline pure, two to four drams; five minutes later drink a full glass of hot water. In conjunction with this, and it is most important, have your patient masticate each mouthful of food taken at least twenty times before swallowing.

"When the claim is made that this will cure any case of indigestion, a fact is stated. The principle is a simple one." Glyco-Thymoline soothes the irritated membrane and through its physiological properties produces a rapid reduction of existing engorgement by exosmosis, stimulates capillary circulation and restores normal gland secretions. The thick accumulations of mucus adhering to the gastric walls are dissolved and the full glass of hot water taken five minutes later serves to wash out any undissolved portions which pass off before the meal is eaten. This leaves the stomach properly cleansed and in a condition that readily allows the admixture of peptic secretion and ingested food. The frequent chewing of each mouthful of food taken is positively necessary as a large proportion of our food is starchy in character and requires complete mastication and admixture of the salivary secretion in order that the Ptyalin, its digestive principle, can come in contact with and transform each particle of starch into sugar ready for assimilation.

This is a simple physiological method of aiding in the establishment of a normal condition, differing entirely from the usual method of using animal ferments to aid digestion, the ultimate result of which is to still further weaken the already partly atrophied digestive glands.

This treatment will improve and to a large extent overcome abnormal conditions such as constipation, sleeplessness, mental depression, etc., dependent upon indigestion.—S. B. McDowell, M. D., Philadelphia, Pa.

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The Charlotte Sanatorium

Charlotte, N. C.

Surgical - - - - Department

THE SURGICAL ROOMS OF THE CHARLOTTE SANATORIUM

The Sanatorium is especially arranged for the handling of a large number of operative cases. Seven rooms have been set apart for the operative department. The designers spared no pains or expense in making these rooms perfect for which they are used, and they are examples of modern efficiency. This department is cut off from the rooms in which the patients are subsequently cared for. They face the South and have an abundance of light and ventilation.

Seventh Street Entrance.

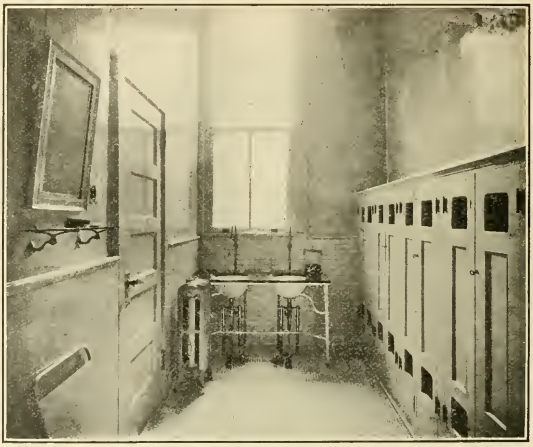
Minor Operating Rooms.

The first room is used for a minor operating room and can also be arranged for examinations and treatments. Tables of the latest pattern are used for operations or examinations, or both as may be necessary. The room is shown prepared for a minor operation with all the necessary dressings and instruments. The cabinets in this room are of steel and glass and contain dressings and sterilized materials of all kinds for general use in the surgical department. In this way the sterilized materials are kept free from dust or other contamination and are always ready for instant use.

Instrument Room.

The next room is the instrument apartment. It contains large instrument cases of the latest models. These cases are filled with every modern surgical instrument, many of which are imported. The collection is most complete and any needed instrument is at once available for any emergency that might arise. To one side are the solution stands in which the standard stock solution are kept, so that the working solutions can be obtained at any moment.

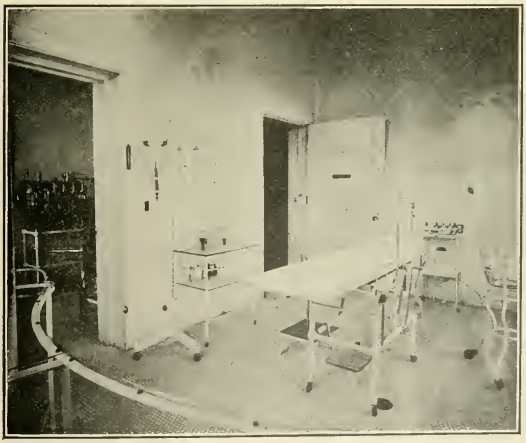
Across the hall from the two rooms previously mentioned is the dressing room for the surgeons. In this room are six roomy lockers and a double lavatory of glass and porcelain. The lavatories were specially made for the Sanatorium and have complete foot control. Adjoining this room and a part of it, is a private bath and toilet. Every convenience is at hand for the operator and his friends to become thoroughly prepared before going into the operating rooms.



Surgeon's Dressing Room.

The next room is the nurses'dressing and preparation room. A large double lavatory with solid glass top and porcelain bowls are used for hand sterilization. These are operated entirely by the foot so that the hands need not touch anything after the preparation has once begun. A large slop sink is set in one corner for solutions and soiled discharges from the operating room. A white enamel table is used for emergency medicines and materials for quick dressings.

Nurses' Dressing Room.



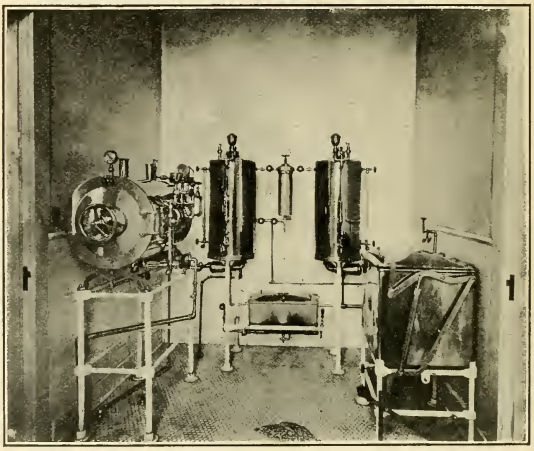
Operating Room A.

This shows operating room A, and indicates the completeness and convenience of the arrangement. The table is of the latest model of white enamel frame, with glass and nickel plated top and nickel plated steel fixtures. On this the patient can be put in any position at a moment's notice. A large circular glass table is used for the instruments and dressings and can be wheeled to the operators' side where everything is at hand. The glass top stool, medicine and anesthetic tables are easily placed at any desired point. The floor is tile, the wainscoting of marble with enamel ceiling. The woodwork is in white enamel and every thing can be thoroughly cleaned.

Operating Room B.

This room is Operating Room B, which has the same dimensions walls and floors as operating room A. Both rooms have large windows facing to the East, South and West, and large sky-lights overhead. In addition to these lights there are in each of these rooms, ten electric globes which combined given an artificial light equal to 1000 candle power. So that an emergency operation at night can be done as well as a formal operation at noon. This room like the other, is fitted up with the most improved-table, stands and other accessories that go along with a modern operating room.

The sterilizing room is, of course, one of the important rooms connected with the operating department. It is situated between the two operating rooms A and B, and communicates with both of them. This room is furnished with two water sterilizers, a large pressure sterilizer for dressings, a full sized instrument sterilizer and a roomy utensil sterilizer in which the largest pans, basins or pitchers can be boiled. By these means everything going into either one of the operating rooms can be made perfectly sterile and absolutely safe.



Sterilizing Room.

This shows the hall leading from the main corridor to the different operating rooms. The first door to the left opens into the minor operating room, the second door is the instrument room, the ones at either end of rolling stretcher, open into operating room A on the left and operating room B on the right. The first door on the right is the surgeons' dressing room and the next opens into the dressing room for the nurses.

Hall.

The solution basins for the hands are shown on stand between the dressing rooms. The patients' carriage or rolling stretcher is shown beneath the clock.

OFFICERS AND STAFF OF SANATORIUM:

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EDWD. C. REGISTER, M. D., Vice-Pres. W. D. WITHERBEE, M. D., Sec.-Treas.

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CHIEF PHYSICIAN

F. C. Laird, M. D.
ASSOCIATE PHYSICIAN

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EYE, EAR, NOSE AND THROAT

A. M. Whisnant, M. D.
J. P. Matheson, M. D.

DISEASES OF DIGESTION

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G. W. Pressly, M. D.
C. M. Strong, M. D.

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A. G. Brenizer, M. D.

GENITO-URINARY AND RECTAL DISEASES

A. J. Crowell, M. D.

CANCER AND SKIN DISEASES

W. D. Witherbee, M. D.

ANESTHETICS

J. C. Montgomery, M. D.

The operating Department in General Surgery is in the hands of the following Specialists:

GENERAL SURGERY— G. W. Pressly, M. D.; C. M. Strong, M. D.; B. C. Nalle, M. D.; and A. G. Brenizer, M. D.

GENITO-URINARY SURGERY—A. J. Crowell, M. D.

EYE, EAR, NOSE and THROAT—A. M. Whisnant, M. D., and J. P. Mattheson, M. D.

CHEMICAL and MISCROSCOPICAL LABORATORY—L. B. Newell, M. D.

LABORATORY OF SURGICAL PATHOLOGY— A. G. Brenizer, M. D,. Director.

The second annual report of the surgical department shows that 444 operations were performed during the year 1910.

Sulphur as an Intestinal Antiseptic.

Wild (Proc. Royal Soc. Med) describes the past and present pharmacology of sulphur and its compounds. Sulphur is unaffected by pure water, but in presence of decomposing organic matter it readily gives off sulphuretted hydrogen, which acts as a local and intestinal antiseptic. The use of sulphur, in the form of the old-fashioned "brimstone-and-treacle," is thus of value in the forms of pustular acne, furunculosis, urticaria, etc., known as "spring rashes." The action of sulphur is not purgative; small doses are equally effective, showing that its action is due to the antisepsis produced by the H2S evolved. Experiments in vitro with sulphur in presence of certain organic substances, such as beef, milk, etc., gave the following results: milk, beef, or sulphur alone with water gave no H2S. Beef or milk with sulphur and water gave H2S; the beef remained undecomposed, while the sulphur gradually disappeared and had to be replaced. The sulphuretted hydrogen apparently prevented growth of putrefactive organisms but did not destroy them, and the sulphur was gradually used up in forming H2S, the action of which is antiseptic and not disinfectant. Experiments with digestive ferments pointed to the conclusion that in presence of acid no H2S is formed, and alkali alone is not sufficient to produce it, but that an alkaline reaction distinctly favours its production when albuminous materials are present. Metallic sulphides are less useful as intestinal antiseptics than sulphur itself; if the stomach is acid they are decomposed rapidly, eructations of H2S occur, and probably none of the sulphur reaches the intestine. Calcium sulphide (calx sulphurata) is frequently beneficial in suppurative conditions in doses of one grain three time sdaily, but two precautions are necessary—it must be freshly prepared, and it must be given in capsules or coated pills so as to avoid decomposition in the stomach. The action of sulphuretted mineral waters is probably largely due to intestinal antisepsis. He says the superior purgative action of magnesium and sodium sulphates by the fact that the sulphate is decomposed and partly reduced to sulphuretted hydrogen. The dietetic value of certain cruciferous vegetables is due to intestinal antisepsis produced by their sulphur content. The objections to the use of sulphur are its tendency to produce depression, both of the circulation and of the nervous system, and the offensive character it imparts to the stools and to the breath. As to its method of administration, the Pharmacopoeia preparations (confection, lozenges, compound liquorice powder, etc.,) answer all requirements.

Tarsal Neuralgia.

Koenig (Deutsche Med. Wchschrft.,) says that among the cases of tarsal neuralgia, those due to affections of the bursae, more particularly, should be treated by non-operative measures. The external application of tincture of iodine was found extremely serviceable in these cases, especially those referable to gonorrhea. There are no remedial agents having a direct action on bony excrescences; fortunately the spur alone does not usually act as a factor producing neuralgia, unless traumatism or bursitis are super-added. In a fairly large number of cases, the author proceeded to operate, always starting with the object to remove the exostoses projecting beyond the body-surface, and especially to extirpate or destroy the affected bursa, as the only or contributory cause of the trouble. The sharp curette, or carbolic acid, were used for this purpose. The incision was applied at the outer aspect of the Achilles tendon and along the external margin of the hell. It is easy to detach, by way of this incision, according to requirements, either the skin alone, or the subcutaneous fatty layer with the skin bursa underneath the sole or the periosteum, in order to expose and remove the bone-affection which is the cause of the neuralgia.

Value of Radiography in the Treatment of Adenopathies.

P. Oudin and A. Zimmern says that in several forms of adenopathies the use of the x-rays causes diminution of the size of the glands. The method, when properly controlled by shields over the normal parts, is without danger, and the only unpleasant effect observed is pigmentation of the skin. Irradiation much less in strength than to cause skin burns will destroy lymphocytes. The rays diminish the size of the glands in inflammatory swelling of the glands, in lymphatic leukemia, in cancer, and in tuberculosis, when treated early before caseation has occurred. Lymphosarcoma may be successfully treated with the rays. In tuberculosis of the glands we get first a parenchymatous reaction with proliferation of the gland flolicles. Later the connective tissue elements undergo hypertrophy, followed by sclerotic action. Early tuberculosis offers a rich field to the treatment by the x-rays; in the stage of suppuration if the pus be evacuated a cure may be obtained; in the stage of atrophic sclerosis they have no further action. In chronic adenitis just below the skin the action is most remarkable. The glands soften gradually and finally entirely disappear. There is no reason to fear generalization of the disease as a result. The best method of treatment is by a series of short sittings. When atrophy is complete we should continue the sittings in order to prevent recurrence. The rays have an excellent effect on old fistulae.—Gazette des Hopitaux.

The Diagnosis of Dunodenal Ulcer.

Mendel (Deutsch. med. Wochenschr.,) says that unless we accept the view of Moynihan, according to whom every case of "hunger

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DIOVIBURNIA, NEUROSINE 2-1 IN NEURASTHENIC UTERINE DISEASES, NON-DESCRIPTIVE CASES AND WHEREVER ANTISPASMODIC AND NEUROTIC IS REQUIRED.
FREE.—Perpetual Visiting Book, 128 pages, full size bottle of Dioviburnia, Neurosine and Germiletum furnished free to Physicians paying express charges. Formulæ and literature, alone, if desired, by mail. DIOS CHEMICAL CO., ST. LOUIS, MO.

pain" is one of duodenal ulcer, the differentiation between this disease and ordinary hyperacidity is often difficult. Duodenal ulcer may exist in the absence of tenderness on palpation, vomiting, gastric stagnation, and occult blood in stoll or stomach contents. Mendel has discovered another sign, which he has found very useful. If we percuss the epigastrium directly, best with a hammer, a small area of tenderness will be found,—usually not larger than a fifty cent piece and rigidly circumscribed,—over which direct percussion elicits pain. This will be observed in both gastric and duodenal ulcers, even when palpation reveals no tenderness. The extent of thi sarea and its location will correspond to the size and the site of the ulcer. In duodenal ulcer, the area of tenderness on direct percussion will lie just to the right of teh linea alba, a little nearer to teh navel than to the costal margin. As the ulcer heals, the area of tenderness can be observed to decrease in extent. In one case of duodenal ulcer, recently observed by us, this sign could not be elicited.

Therapeutically, Mendel favors rest in bed and diet rather than operation.

A Remarkable Anesthetic is This.

An anesthetic that is slowly but surely displacing chloroform and ether is Hyoscine-Morphine-Cactin Compound. It may be used in connection with chloroform if desired of which only a few whiffs will be required, or it may be used alone by one of experience pushed to effect, when it produces an anesthesia under which the most extensive operations may be performed. And, all the while the knife is being used, the patient feels absolutely no pain, yet he is conscious and able to answer any question put to him during the entire operation.

What is more—it is safer than any other anesthetic in common use. Statistics prove it. Over ten million tablets have been used in all sorts of cases by all sorts of operators still only eight deaths have ever been charged to it and these cases would probably have died anyway.

Hyoscine-Morphine-Cactin Compound is injected hypodermically to produce anesthesia. Employed in this way or given by mouth it is an effective pain-reliever in neuralgia, strangulated hernia, colic and all painful conditions. It is a god-send in obstetrics—for subduing the pangs of childbirth.

Again it is a sedative of a high order, the best one can give in spasms (as hiccoughs) or manias (as delirium tremens.) It enables the doctor to control the patient perfectly and may be pushed till sleep is secured.

The Abbott Alkaloidal Company, of Chicago, make it; they offer to send a sample and booklet to any doctor who is interested.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm name of Sander & Sons is illicitly appropriated, the make up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physican should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Assistance From the School Physicians in Infantile Paralysis.

Serena advocates the paying of especial attention by the school physicians to the orthopedic treatment of children who have recovered from infantile paralysis sufficiently to go to school. He thinks that it has been demonstrated that it is a mistake to wait for electric treatment in these cases until all the early symptoms have subsided. The electricity should be begun as soon as the health of the little patient will permit it. Massage and passive movements are also of value in these cases to preserve the integrity of the paralyzed muscles and to prevent contractures. After the case has in a measure lost its interest for the family physician, and the child has returned to school hampered by his disability, he is apt to go ahead mentally, while he is unable to take part in the games of his fellows, and precious time is lost and atrophy and contracture occur, which render it difficult to get a good result when surgical measures are undertaken. If the school physician would take pains to see that these cases are under good orthopedic treatment the benefit would be incalculable and we should have fewer candidates for the institutions for incurables.—Gazetta Medica di Roma.

Each return of the season in which these affections prevail witnesses an increase reliance on the part of physicians on

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Cough
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Glyco-Heroin (Smith) has always been distinguished for the exceptional promptness with which it relieves respiratory distress, promotes expectoration and allays inflammation of the bronchial and pulmonary passages.

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Treatment of Leukemia.

Sternberg, of course, dwells most on radiography, which is so efficacious in certain leukemic cases, yet fails outright in others. It would appear that the rays should be exhibited under conditions not yet understood, in order to be efficacious. Arsenic has also been similarly exhibited in leukemia and its congeners (pseudolenkemia and lymphosarcoma), with the same irregularity in results. Leukemia patients frequently suffer from gastroinestinal anomalies, which may naturally be offset by proper treatment. Some leukemias under arsenic medication often exhibited phenomena due to arsenic alone; the latter have to be combated else they will be set down to the disease itself. This is more the case in the overaction of arsenic plus that of x-rays. The special symptoms of arsenical poisoning include herpes zoster and obstinate dermatitis of the mouth. Arsenical neuritis with paralysis of nerves is common. Beyond this mark arsenicism is not to be expected, author would push the x-rays; using arsenic as a reservation measure. The ill effects of the latter should be supplemented or and such results may be antagonized by an antiarsenical regiment. In conclusion the offset by a course of radioactive mineral such as nosebleed, should be treated by the most approved remedies (cocaine, adrenalin). Radiography is always indicated. waters, sunbaths, etc. Special complication

Acromegaly as a Result of Fright.

Pel of Amsterdam (Berlin klin Mochen,, calls attention to this association in 1891. No one has reported any similar association during the 20 years elapsed. Now Pel has added two cases to his first one. The first of these latter began in a married woman aged 25, who was shocked mentally by a gas explosion. Menstruation was suppressed for 9 months and then was resumed sparingly and irregularly. Gradually the hands, feet and face began to enlarge. There was no change in the glandular organs, and the sevual apparatus became atrophied. The encephalon remained normal. Patient, although well, tired quickly. The x-ray showed enlargement of the sella turcia. There was no other evidence of pressure atrophy within the skull. The second case was in a woman aged 47, who complained of ready fatigue, general exhaustibility, affections of the psyche and vision, and enlargement of hands, feet and face. Some 16 years before, while pregnant, patient was violently alarmed by a fire. Gestation not interrupted, no anomalies of puerperium or lactation. After the lactation period, the disease in question made its appearance. A climacteric resulted. The subject complained of pains in the head and face, arms, legs, hands, feet and face. Vision was affected. In a few months acromegaly was apparent. At the present time, 10 years later, there was marked muscular weakness, including the heart—the picture of muscular hypotonia. The teeth are separated from one another. The spine is a state of kyphosocoliosis. Patient has periodical epileptic attacks, or rather epileptiform attacks, beginning in the right arm or facialis, but becoming general and typical. The pupilae of the eye were pale; the usual acuity and field of vision were much reduced. Hemianopsia was absent. These symptoms could be explained by a pressure on both opticus roots before the chiasm. The internal organs showed no anomalies. The sexual atrophy was marked in the highest degree. The headaches were one sided and in fact represented a sort of migraine. Rontgen investigation showed a marked dilatation of the sella turcica.

A Nerve Pacifier.

Any remedy that lightens the burden of woman during the menopause is much to be esteemed. Such a remedy is neurilla, the action of which is that of a nerve equalizer or pacifier in all conditions of nervous unrest, whether it be in the convulsion of children, or the chronic restlessness of older people. In all such conditions it may be considered as well nigh a specific—Massachusetts Medical Journal.

The Peculiar Tonic and Restorative Properties of Sanmetto.

The peculiar tonic and restorative properties of sanmetto in cases of extreme nerve exhaustion, notably when its origin is in the sexual sphere, have been demonstrated by us in the treatment of a large number of patients, with varied forms of sexual disease. Continued a sufficient time, we have seen the lost energies return in the ancient roue and the neophyte alike. That with this remedy a class of patients are relieved and cured, who have run the gauntlet of the quacks of all degrees, there can be no doubt. We most sincerely commend

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sanmetto to the regular profession as a means of relieving an unfortunate class of patients, and at the same time rescuing them from the grasp of the soulless and the quack who fatten at the expense of their unfortunate condition.

Drs. Purdy & Jordan, Wichita, Kan.

The Cure of Enuresis in Children.

According to some the cause is a hyperplasia of the central nervous system. The immediate cause is a hyper-excitability of the detrusor vesicæ, with relaxation of the sphincter of the urethra, or a lack of development of the prostate and failure of the bladder orifice to close. The therapeutic measures must depend upon the conditions that exist. General hygienic and dietetic measures are appropriate in all conditions. For hyper-excitability of the detrusor, deficieny of the sphincter and lack of development of the prostate, causing deficient closure of the bladder orifice, to eight ounces of sanmetto add eight drops of belladonna and eight drops of tinct. nux vomica, and of this one-half to one teaspoonful given before each meal and at bedtime will be found useful. For reflex enuresis the removal of the cause followed with sanmetto.

The Declension of Bodily Vigor.

In the declension of bodily vigor, before instituting measures whose object is to overcome the decline, the chief aim should be to determine with exactness the cause. In the large majority of cases, the cause ascertained, the need for a reconstructive will be plain. The blood will be found to be in need of corpuscular elements, the tissues, in general, will be in need of a serviceable nutrient. Cod liver oil, in the form of a palatable and easily assimilated cordial—such as Cord. Ext. Ol. Morrhuæ Comp. (Hagee) will meet the every requirement of a patient showing evidences of bodily decline. Not alone do the nutritious qualities of Cord. Ext. Ol. Morrhuæ Comp. (Hagee) give it pre-eminent value but its palatability and the ease of its digestion augment in a considerable degree its therapeutic worth.

A Good Bismuth Preparation.

After an exhaustive study of the chemical and physical properties of bismuth and its compounds, the chemical experts of Parke, Davis & Co. succeeded, two or three years ago, in perfecting what many physicians consider the most eligible preparation of the kind, "Milk of Bismuth," P. D. & Co , a mixture containing the hydrated oxide of bismuth in suspension. The product is stable under all ordinary conditions of temperature and exposure to light and air.

The advantage which Milk of Bismuth, P. D. & Co., possesses over other compounds of the metal is the state of fine subdivision in which the hydrated oxide is presented. This insures its more thorough distribution over the mucous surface of the alimentary canal, upon which it exerts a peculiarly beneficial effect. Its action is not only astringent, but, as some writers have observed, it seems to have a specific effect upon certain lesions as ulcers, causing them to heal. It is also an antacid and protective, and is undoubtedly mildly antiseptic. Each fluid drachm of Milk of Bismuth; P. D. & Co , represents the bismuth equivalent of 4 grains of the sub-nitrate.

An Improved Hydrated Magnesia.

An agent which undoubtedly deserves to be more widely employed than it is at present is magnesium oxide. While long held in high professional favor, many physicians in the past have refrained from prescribing it because of the many faulty preparations which found their way upon the market. Practitioners who have felt this restraint would do well to make a test of Milk of Magnesia, P. D. & Co., an improved hydrated magnesia which lacks the objectionable features of many similar preparations and which may be depended upon for uniform and certain results.

Milk of Magnesia, P. D. & Co., is a purely aqueous mixture, concentrated and active, each fluid ounce representing about 32 grains of magnesium hydrate. It does not contain sodium sulphate. It is entirely stable under ordinary conditions, remaining unchanged indefinitely. The product is valuable as an antacid and gentle laxative in sick headache, gout and other complaints

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attended with hyper-acidity and constipation; in diarrhea, due to intestinal fermentation; in gastric disorders peculiar to children, in which acidity of the primæ viæ is often a prominent feature; and whenever gastric irritability and deranged function is present, as evidenced by nausea, gastralgia, eructation, pyrosis and other manifestations of hyperacidity. It is pleasant to take, being readily accepted by children and persons of fastidious taste.

Dr. P. W. Covington to Fight Hookworm Disease.

Dr. P. W. Covington, of Rockingham, has given up his private practice to assume the duties of District director of the campaign against hookworm disease. Doctor Covington is to be congratulated on receiving this important appointment, and upon having the opportunity for extending his valuable work over a large territory. He, like the other three district directors already at work in the state, is well-fitted to fill his office. He received his academic education at Davidson college and his medical education at the University of North Carolina and the University of Maryland. After serving as hospital resident physician for one year he located at Rockingham. There he has built up a splendid practice, held important medical appointments, and won the esteem of the country at large,

The three physicians already holding positions as District directors are Doctors B. W. Page, C. F Strosnider, and C. L. Pridgen. These, with Dr. John A. Ferrell, the State director of the campaign, make four physicians giving their entire time to the hookworm campaign in North Carolina. Besides the physicians there are six microscopists in the Laboratory of hygiene at Raleigh, devoting their entire time to making the examinations for hookworm infection.

Since the beginning of the campaign more than 20,000 people in the State have availed themselves of the opportunity for having free examinations made for the disease. Approximately one third of them have shown infection. The rapid progress made in educating the people on the eradication of the disease and general sanitation, and

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SAL HEPATICA is especially valuable when there is torpidity of the bowels or intestinal sluggishness arising from organic derangement of the liver, kidneys or central organ of circulation. It is the best agent for the relief of that form of costiveness that is ushered in by an attack of colic and indigestion, and not only clears away the effete and irritating agents lodged in the alimentary tube but eliminates the semi-inspissated bile that, too frequently, induces the so-called "bilious" condition; at the same time an abundant secretion of normal bile is assured, thereby demonstrating its value as a liver stimulant and true cholagogue.

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AN EFFICIENT NEUROTIC, ANODYNE and HYPNOTIC. Unexcelled in all forms of Neurasthenia, almost a specific in Epilepsy. Contains no Opium, Morphine or Chloral. Combine two parts DIOVIBURNIA, one of Neurosine, in all forms of Female Neurosis. FREE—FULL SIZE bottle of DIOVIBURNIA. NEUROSINE and GERMILETUM, with complete formula and literature, furnished only to Physicians, who desire to give same a trial.

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their splendid response point to the ultimate eradication of this and allied diseases. The workers should have the hearty co-operatton of every citizen.

The Saline Laxative--Its Usefulness.

All authorities agree that magnesium sulphate (epsom salts) is a good and useful evacuant, barring its vile taste, which even a liberal addition of lemon juice does not conceal.

Years ago the Abbott Alkaloidal Co., of Chicago, essayed to make it palatable and they succeeded. Abbott's Saline Laxative affords all the goodness of pure, full-strength magnesium sulphate, without its objectionable features. With water it yields a sparkling, cooling draught, which no patient will refuse.

Others have tried to steal the credit that properly belongs to them, but there are at least 50,000 doctors in this country, who are not influenced by mere words to believe that the salts patterned after it are 'just as good.'

Abbott's Saline Laxative is a balanced, just right, preparation. It is regular in action. It acts energetically but gently. It does the work and never gripes nor distresses.

In full doses it serves perfectly as a quick purge; in summer toxemias to clear the bowel tract of toxin-breeding, bacteria-feeding waste. It is just the thing in small daily doses, in constipation, biliousness and liver torpor. It is better and cheaper than the mineral waters so blatantly exploited. The Company will send a sample bottle on request. Write for it.

THE SUPRARENAL SITUATION,

The United States Circuit Court Upholds Product Patent on the Natural Active Principle.

When Vulpian, a French chemist, in 1856 reported that the supra-renal glands of mammals contained a peculiar substance giving certain color reactions with ferric chloride, iodine and alkalies, and quickly changing on contact with the air and exposure to the light, little might any one have expected that 55 years later this peculiar substance would be the subject of a product patent.

In 1904 the H. K. Mulford Co. placed on the market its brand of Epinephrine, Adrin, the active principle of the adrenal gland, believing that the pioneer work done by von Furth and Abel justified it in doing so, and that a product patent on the active principle existing in nature could not possibly be upheld, particularly in view of the fact that its existence had been recognized for 50 years; that nearly all of its chemical reactions and properties were previously known and described; that its chemical nature had been accurately predicted, that its medicinal virtues had been discovered and put into practical use; and that it had been actually isolated in various degrees of purity in the form of a benzoylated derivative, and in the form of a zinc and iron compound.

The H. K. Mulford Co. regarded its product as a substantially different product, obtained by a substantially different process, from those specified in the Takamine patent and did not believe that the latter, if held valid at all, could be construed to cover and include the Mulford product.

Moreover, the H. K. Mulford Co., recognizing that the first object of the patent law is "to promote progress in the Sciences and Arts," believed and still believes that the granting of Product Patents on medicinal substances, whether or not they exist preformed in nature, are a hindrance to, rather than a means of promoting progress in the practice of medicine, and used their efforts to defeat a product patent which it deemed to be not only contrary to the object and spirit of the patent law, but contrary to the best interests of pharmacologic practice in the United States.

On April 29, 1911, Judge Hand, in the United States Circuit Court for the Southern district of New York, handed down a decision sustaining certain of the patent claims of Dr. Takamine and declaring H. K. Mulford Co. products to infringe these claims.

The H. K. Mulford Co. wishes to call attention to the fact that, in defending these suits, it has consistently and at great cost, endeavored to uphold its antagonistic position toward the product patent for medicinal